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OM nucleic - nucleic search, using sw model Run on: March 7, 2004, 05:28:16; Search time 10901 Seconds (without alignments) 11204.538 Million cell updates/sec

Title: Perfect score: Sequence: 

Scoring table: IDENTITY\_NUC Gapop 10.0 , Gapext 1.0

Total number of hits satisfying chosen parameters: Searched: 3470272 seqs, 21671516995 residues

6940544

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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## ALIGNMENTS

AUTHORS TITLE JOURNAL	REFERENCE	ORGANISM	SOURCE	KEKSTON VEKSTON	ACCESSION	DEFINITION	LOCUS	BD016833	RESULT 1
Honjo, T. and Muramatsu, M. Novel cytidine deaminase Patent: JP 2001245669-A 6 11-SEP-2001;	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.  1 (bases 1 to 2818)	Homo sapiens	Homo gapiens (human)	.TD 2001245660-2/6	BD016833	Novel cytidine deaminase.	BD016833 2818 bp DNA linear PAT 27-AUG-2002		

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481 GCAAATAGCCATCATGACCTTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAA 540	361 GGCCGACTTTCTGCGAGGGAACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCG	241 CTGCCACGTGGAATTGCTCTTCCTCCGCTACATCTCGGACTAGACCCTAGACCCTGGCCG 300	121 ATTCAAAAATGTCCGCTGGGCTAAGGGTCGGCGTGAAGACCTACCT	61 AGACACTCTGGACACCACTATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCA 120	* Match 100.0%; Score 2818; DB 6; Length 2818; Local Similarity 100.0%; Pred. No. 0; Local Similarity 100.0%; Pred. No. 0; Local Similarity 100.0%; Pred. No. 0; Indels 0; Gaps 0; Lagagaaccarcartaattgaagtgaagattttttctggcctgaagactttgcaggaaggcaaga 60	PC C12N5/10,C12N9/78,C12P21/02,C12P21/08//(C12N1/21,C12R1:19), PC (C12N5/10,C12R1:91),C12R15/00,C12N5/00,C12N1:91) CC FT (C12N5/10,C12R1:91) CC FT S'UTR (1)(79) FT CDS (80)(876) FT 3'UTR (80)(876) FT 3'UTR (677)(2818). Location/Qualifiers 12818 12818	JAPAN TOBACCO INC, TASUKU HONJO OS Homo sapiens (human) PN JP 2001245669-A/6 PD 11-SEP-2001 PF 28-MAR-2000 JP 2000092981 PI TASUKU HONJO, MASAWICHI MURAWATSU PC C12N15/09, A61K39/395, A61K39/395, A61P1/00, A61P11/06, A61P13/12, PC A61P17/00, PC A61P27/02, A61P27/16, A61P37/02, A61P37/08, C07K16/18, C12N1/19, PC C12N1/21,
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**mRNA** 

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CTTTACCAATT

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DEFINITION
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Location/Qualifiers
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Revy,P., Muto,T., Levy,Y., Geissmann,F., Plebani,A., Sanal,O., Catalan,N., Forveille,M., Dufourcq-Lagelouse,R., Gennery,A., Tezcan,I., Ersoy,F., Kayserili,H., Ugazio,A.G., Brousse,N., Muramatsu,M., Notarangelo,L.D., Kinoshita,K., Honjo,T., Fischer,A.
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Muto,T., Muramatsu,M.,
Direct Submission
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Activation-induced cytidine deaminase (AID) deficiency causes the autosomal recessive form of the Hyper-IgM syndrome (HIGM2) Cell 102 (5), 565-575 (2000)
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DFGYLRNKNGCHVELLFLYISDWDLDPGRCYRVTWFTSWSFCYNTFVENHERTFK
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AWEGIHENSVRLSRQLRRILLPLYEVDDLRDAFRTLGL"
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Novel cytidine deaminase
AL Patent: JP 2001245669-A 33 11-SEP-2001;
JAPAN TOBACCO INC, TASUKU HONJO
OS Homo sapiens (human)
PM 11-SEP-2001
PF 28-MAR-2000 JP 200092981
PF 28-
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Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
1 (bases 1 to 11204)
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BD016860.1 GI:22558036
JP 2001245669-A/33.
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CCATGATCTATAGGACCTCCTAATGAGAGTATCTGGGTGATTGTGACCCCAAACCATCTC
                                                                                GATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGGTAACACAAAACTCTTCCATCAGG
                                                                                                                                                        TTTTTATATCAACATCCTTTATTTGATTCATTTGAGTTJAACAGTGGTGGTTAGTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                         GAAAAAATATTTATATACGACTCTTTAAAAAAGATCTATGTCTTGAAAATAGAGAAGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAAAAATATTTATATACGACTCTTTAAAAAGATCTATGTCTTGAAAATAGAGAAGGAAC
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                                                          GATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGG
                                                                                                                                                                                                           CTTTTAGGTAGGATGAGAGCAGAAGGTAGATCCTAAAAAGCATGGTGAGAGGATCAAATG
                                                                                                                                                                                                                                     CTTTTAGGTAGGATGAGAGCAGAAGGTAGATCCTAAAAAGCATGGTGAGAGAGGATCAAATG
                                                                                                                                                                                                                                                                                      CTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGTGTCAACGTTTTTCTATGA
                                                                                                                                                                                                                                                                                                            CTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGTGTCAACGTTTTTCTATGA
                                                                                                                                                                                                                                                                                                                                                               ACAGGTCTGGCCAGGGACGTGCTGCAATTGGTGCAGTTTTGAATGCAACATTGTCCCCTA
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                                                                                                                                   TTTTTATATCAACATCCTTTATTATTTGATTCATTTGAGTTAACAGTGGTGTTAGTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCACTTTCTTAGAGTTTACA
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
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Pred. No. 0;
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and Durandy, A.  Activation-induced cytidine deaminase (AID) deficiency causes the autosomal recessive form of the Hyper-IgM syndrome (HIGM2)  JOURNAL Cell 102 (5), 565-575 (2000)  MEDLINE 20460541  PUBMED 11007475  REFERENCE 3 (bases 1 to 11204) AUTHORS Muto, T., Muramatsu, M., Taniwaki, M., Kinoshita, K. and Honjo, T.  TITLE Direct Submission  JOURNAL of Medical Chemistry, Faculty of Medicine; Yoshida, Sakyo-ku,	JOURNAL Genomics 68 (1), 85-88 (2000)  MEDLINE 20408890  PUBMED 10950930  REFERENCE 2 (sites)  AUTHORS Revy.P., Mato.T., Levy.Y., Geissmann.F., Plebani,A., Sanal.O., Catalan,N., Forveille,M., Dufourcq-Lagelouse,R., Gennery.A., Tezcan,I., Ersoy.F., Kayeerili,H., Ugazio,A.G., Brousse,N.,	Homo sapiens (human) SM Homo sapiens Eukaryota; Metazoa; Choi Mammalia; Eutheria; Prin E 1 (sites) S Muto,T., Muramatsu,M., 7 Isolation, tissue distri	RESULT 5 AB040430 AB040430 AB040430 AB040430 DEFINITION Homo sapiens AID gene for activation-induced cytidine deaminase, complete cds. ACCESSION AB040430 VERSION AB040430.1 GI:9988407 KEYMORDS AID; activation-induced cytidine deaminase.	Db 11050 ATAAAATACCAAATAAATAATAAAAGTGATTTATATGAAGTTAAAATAAAAAA	QY 2717 ATAAAATAATAAATAAATAAATAATTTTGGAAGCTGTGAAG 2776  QY 2717 ATAAAATAAATAAATAAATAAATAATTTTGGAAGCTGTGAAG 2776	2597 AGTAATGGTGCTACGAAGCCATTTCTCTTGATTATTAGTAAACTTTTATGACAGCAAATT	Db 10810 CTAATGATTTTTTATTAACATGATTTCTTTTTCTGATATATTGAAATGGAGTCTCAAAGC 1086  OY 2537 TTCATAAATTTATAACTTTAGAAATGGAATTCTAATAACAACGTATGTAACATTGC 2596	OY 241/ IGHAAAGAGITAAAAATIGTAGCTCATGTATTCATTTAAATTTATATTATA	2357 10690	Db 10630 TTCAGAATAACCATATCCCTGTGCCGTTATTACCTAGCAACCCTTGCAATGAAGATGAGC 1068

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ATCAGTTAAATAAATGATAAATAATTTTGGAAGCTGTGAAG 11049
                                                                                                                                                         NTCAGTTAAATAAATGATAAATAATTTTTGGAAGCTGTGAAG
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                                                                                      VATATAAAAAGTGATTTATATGAAGTTAAAAATAAAAAATCAG
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                                                                                                                                                                                                       ATTTCTCTTGATTTTAGTAAACTTTTATGACAGCAAATT 10989
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	1277 TGTTTGTACAAAAGAAGATTGTTATGGGTGGGGATGGAGGTATAGACCATGCATG	1217 TCCAAAGCATTAATATCCAATCATGCGCTGTATGTTTTAATCAGCAGAAGCATGTTTTTA 1276	1157 CCATGATCTATAGGACCTCCTAATGAGAGTATCTGGGTGATTGTGACCCCAAACCATCTC 1216	1097 GATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGG 1156	1037 TTTTTATATCAACATCCTTTATTTGATTCATTTGAGTTAACAGTGGTGTTAGTGATA 1096 	977 CTTTTAGGTAGGATGAGAGGAAGGTAGATCCTAAAAAGCATGGTGAGAGGATCAAATG 1036	917 CTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGTGTCAACGTTTTTCTATGA 976	857 ACAGGTCTGGCCAGGGACGTGCTAATTGGTGCAGTTTTGAATGCAACATTGTCCCCTA 916	797 GAAAAAATATTTATATACGACTCTTTAAAAAGATCTATGTCTTGAAAATAGAGAAGGAAC 856	737 AACAGTOCTTCAAGTCTTCTCTGTTTTATTCTTCAACTCTCACTTTCTTAGAGTTTACA 796	677 TAGCAACTTCCAGGAATGTCACACACGATGAAATATCTCTGCTGAAGACAGTGGATAAAA 736 	617 CTTTTGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTGGGACTTTGA 676	/ Match 77.2%; Score 2174.6; DB 9; Length 11204; Local Similarity 99.8%; Pred. No. 0; nes 2177; Conservative 0; Mismatches 4; Indels 0; Gaps 0;	DFGYLRNKNGCHVEILFLRYISDWDLDPGRCYRVTWFTSWSPCYDCARHVADFLRGNP NLSLRIFTARLYFCEDRKAEPEGLRRLHRAGVQIAIMTFKDYFYCWNTFVENHERTFK AWEGLHENSVRLSRQLRRILLPLYEVDDLRDAFRTLGL"	<pre>/product "activation-induced cytidine deaminase" /protein id="BAB12720.1" /db_xref="c1:998408" /translation="MDSLLMMRRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL</pre>	/gene="AID" join(521528,62806427,78078077,83718486,8956 /gene="AID" /codon start=1	.u. \ \ \	<pre>Kyoto, Kyoto 606-8501, Japan (B-mail:honjo@mfour.med.kyoto-u.ac.jp,     Tel:81-75-753-4371(ex.4371), Fax:81-75-753-4388) RES</pre>
Ş	D	₽ <b>₹</b>	} B &	, B &	, B &	p Q	g Q	לס עס	) B &	Db Qy	g 90 97	4g 4g	g S	g Q	g Qy	B 8	B &	g Q
2417 TGTAAAAGAGTTAAAAATTGTTACTTCATGTATTCATTTATATTTTATATTATTTTTGCGT 2476	2357 AGATICCACAGGAAAACTIGAATGCACAACTGTCTTATTTTAATCTTATTGTACATAAGTT 2416 	97 TICAGAATAACCATATCCCTGTGCGTTATTACCTAGCAACCCTTGCAATGAAGATGAGG 30 TICAGAATAACCATATCCCTGTGCCGTTATTACCTAGCAACCCTTGCAATGAAGATGAGG 30 TICAGAATAACCATATCCCTGTGCCGTTATTACCTAGCAACCCTTGCAATGAAGATGAAG	7 TATITGICICITITGGIGICATITGICCTAACAACTGTCTITGACAGTGAGAAAAAAA 0 TATITGICICITITGGIGICTATITGICCTAACAACTGTCTITGACAGTGAGAAAAATA 0 TATITGICICITITGGIGICTATITGICCCTAACAACTGTCTITGACAGTGAGAAAAATA	AGCATIGCAGGAATIGIGCTTTATCCAACAAATGTAAGGAGCCATTAAGGATCCC	17 AAAAAAAAAAAAAAAAGAGAGAGAGAGAGAAAAGAGACAATATTTTGGGAGAGAGA	7 AGCTGAGATCGTGCCGTTGCACTCCAGCCTGGGCGACAAGAGCAAGACTCTGTCTCAGAA		CCCCGTCTGTACTCAAAATCCAAAAATTAGCCAGGCGTGGTAGCAGCACCTGTAATCCC 199	CGAGCCGGGCGATCACCTGTGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAAA	17 AAGAAAGAGAGAGGCCGGGCGTGGTGGCTCACGCCTTTAATCCCAGCACTTTGGGAGGC	57 GTTCAAGGCCAGCCTGGGCAACATAACAAGATCCTGTCTCTCTAAAAAAAA	ACACCCTCATACTTCTAGCTGCTTGGGAGGTTGAGGAGGGAG		1577 GAAAIGCCAATCAGGICAAGGITIGCTACAITTIGTAIGIGIGIGIGAIGCIICTCCCCAAAG 1636 	1517 AAGTIGCTIGAAIGIIGGGGAGAGAAAAICIAITGGCICTCCGIGGGTCICTTCAICTCA 1576 	1457 GTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTAGCAAACAATTGGAAGG 1516 	1397 TAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAA 1456 	1337 CTTCAAGCTACTTTAATAAAGGATCTTAAAATGGGCAGGAGGACTGTGAACAAGACACCC 1396 

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RESULT 6
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Muzny, D. M., Adams, C., Adio-Oduola, B., Ali-osman, F.R., Allen, C., Alsbrooks, S.L., Amaratunge, H.C., Are, J.R., Ayele, M., Banks, T., Barbaria, J., Benton, J., Bimage, K., Blankenburg, K., Bonnin, D., Bouck, J., Bowle, S., Brieva, M., Brown, E., Brown, M., Byzant, N.P., Bouky, J., Bowle, S., Brieva, M., Brown, E., Brown, M., Byzant, N.P., Burket, J., Burket, C., Burch, P., Burkett, C., Burch, P., Byzd, N.C., Carron, T.F., Carter, M., Cavazos, S.R., Chacko, J., Chavez, D., Chen, G., Chen, R., Chen, Z., Chiu, D., Chowdhry, I., Christopoulos, C., Chen, R., Chen, Z., Chiu, D., Chowdhry, I., Christopoulos, C., Chen, R., Chen, Z., Chiu, D., Chowdhry, I., Christopoulos, C., Chen, R., Cavasos, S.R., Chacko, J., Christopoulos, C., Chen, R., Cavis, M., Davis, K.J., Datolin, K.J., Davis, K.J., Davyla, R., David, R., Delgado, O., Denn, A.I., Ding, Y., Dinh, H.H., Douthwaite, K.J., Dayer, H., Dugan-Rocha, S., Durbin, K.J., Escotto, M., Palls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Gabisi, A., Gao, J., Garcia, A., Garner, T., Garzia, N., Gill, R., Gorrell, J.H., Guevara, W., Gunaratne, P., Hale, S., Hawes, A., Herrandez, J., Harris, C., Harris, K., Hart, M., Haylak, P., Hawes, A., Herrandez, J., Homsi, F., Howard, S., Huber, J., Hulyk, S., Hume, J., Ioshikhes, I., Jackson, L.E., Jacobson, A., Hogues, M., Willer, R., Lewis, L., Jacobson, B., Jia, Y., Jahas, P., Jia, Y., Lind, R., Landry, N., Leal, B., Lee, B., Lewis, L.C., Lewis, L.J., J., Li, J., Li, Z., Lichtarge, O., Lieu, C., Liu, J., Liu, M., Landry, N., Marcindal, A., Martinez, E., Mague, P., Marindal, A., Martinez, E., Mague, M., Marindal, A., Martinez, S., Moser, M., Martinez, S., Moser, M., Martinez, S., Moser, M., Martinez, E., Maguen, N., Orwoonu, G., Chulles, M., Ren, Y., Marindal, A., Martindal, A., Martinez, E., Mague, L., Marindal, A., Martin
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BAC Library) complete sequence.
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AC092184.7 GI:23>^^~
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of Molecular and Human Genetics, Baylor College of Medicine Baylor Plaza, Houston, TX 77030, USA
On May 25, 2002 this sequence version replaced gi:20901754.
INFORMATION: http://www.hgsc.bcm.tmc.edu/ or email
                                                                                                                                                                                                                                           Worley,K.C.

Direct Submission

Submitted (25-MAY-2002) Human Genome Sequencing of Molecular and Human Genetics, Baylor College of Molecular and Human Genetics, USA
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Direct Submission
Submitted (25-JUM-2001) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
                                                                                                                                                                    Direct Submission Submitted (12-JUN
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of Molecular and Human G
Baylor Plaza, Houston, T
4 (bases 1 to 71132)
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COMMENT

CLONE LENGTH: This sequence does not necessarily represent the entire insert of this clone. Overlapping regions of clones are only sequenced and submitted once, so the sequence for the remainder of the insert may be found in the record for the adjacent clones. Overlapping clones are noted at the beginning and end of the reatures listing.

ANNOTATION OF FEATURES:

STSs are identified using ePCR (Genome Res. 7:541-550) searches of a local database that includes entries from dbSTS, GDB, and local mapping efforts.

Repeats are identified using RepeatMasker (A. Smit and P. Green, unpublished.) for Human and Mouse sequences.

Genes and Region of sequence similarity are identified by BLAST (Nuc. Acids Res. 25:3389-3402) similarity (expect < le-34) to the EST and cDNA sequences. Genes demonstrate at least two exons flanked by consensus splice sites that maintained sequence continuity across the splice junctions. Sequences that are not dentical matches are annotated as similar.

SEQUENCING READ COVERAGE:Sequencing is completed to a minimum standard of double strand coverage with a minimum of 2 clones and 2 reads with no ambiguities or 2 Chemistries with a minimum of 2 clones and 3 reads with no ambiguities. If the sequence quality for a region does not meet this standard, it will be indicated in the annotation as Low Coverage.

QUALITY OF INDIVIDUAL BASES: This sequence meets stringent quality standards - estimated error rate less than 1 per 10,000 bases. Reports of lowest quality individual bases and messures of base quality are listed below. Description of the metrics can be found quality are listed at URL: .edu:8088/quality.info/genbank.annotation.html

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complement(11227. .12175)
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              /standard_name="87432"
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                             TAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAA
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                                                           TAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAA 1456
                                                                                        CTTCAAGCTACTTTAATAAAGGATCTTAAAATGGGCAGGAGGACTGTGAACAAGACACCC
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                                                                                                                                                   /rpt_family="AluY"
complement(15813..17136)
/rpt_family="L1PA8"
complement(17272..17395)
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TTCATAAATTTATAACTTTAGAAATGATTCTAATAACAACGTATGTAATTGTAACATTGC
                                                                  CTAATGATTTTTTATTAACATGATTTCCTTTTCTGATATATTGAAATGGAGTCTCAAAGC
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Novel cytidine deaminase
Pattent: JP 2001245669-A 13 11-SEP-2001;
JAPAN TOBACCO INC,TASUKU HONJO
OS Homo sapiens (human)
PN JP 2001245669-A/13
PD 11-SEP-2001
PN JP 2001245669-A/13
PD 11-SEP-2001
PC 28-MAR-2000 JP 2000092981
PF 78-SUKU HONJO, MASLAWICHI MURAMATSU
PC C12N15/09, A61K39/395, A61K39/395, A61P1/00, A61P11/06, A61P13/12,
PC A61P17/00, A61K39/395, A61K39/395, A61P37/08, C07K16/18, C12N1/19, PC
A61P17/00, A61F27/16, A61P37/02, A61P37/08, C07K16/18, C12N1/19, PC
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Mammalia; Eutheria; Primates;
1 (bases 1 to 2172)
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JP 2001245669-A/13.
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                                                                                                                                                                                                                                                           Similarity
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C C12N5/10,C12N9/78,C12P21/02,C12P21/08//(C12N1/21,C12R1:19),
C (C12N5/10,C12R1:91),C12N15/00,C12N5/00,C12R1:91) CC
                    ATATTTATATACGACTCTTTAAAAAGATCTATGTCTTGAAAATAGAGAAGGAACACAGGT
                                                                           CCTTCAAGTCTTCTGTTTTTATTCTTCAACTCTCACTTTCTTAGAGTTTACAGAAAAA
                                                                                                                     CTTCCAGGAATGTCACACGATGAAATATCTCTGCTGAAGACAGTGGATAAAAAAACAGT
                                                                                                                                          CTTCCAGGAATGTCACACACGATGAAATATCTCTGCTGAAGACAGTGGATAAAAAAACAGT
ATATTTATATACGACTCTTTAAAAAGATCTATGTCTTGAAAATAGAGAAGGAACACAGGT
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/mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
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RESULT 8 BC006296 BC006296 BC006296 DEFINITION Homo sapiens activation-induced cytidine deaminase, mRNA (cDNA clone MGC:12911 IMAGE:4054915), complete cds.  ACCESSION BC006296 VERSION BC006296 BC006296.2 GI:33871601 KEYWORDS HOMO sapiens (human) ORGANISM Homo sapiens Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	Qy 1943 CTGTACTCANANTGCANACTAGCCAGGGGTGGTAGCAGGCACCTGTTAATCCCAGCTAC Db 1321 CTGTACTCANATGCANATTAGCCAGGGGTGGTAGCAGGCACCTGTTAATCCCAACTAC 2003 TTGGGAGGTGAGGCAGGAAATTAGCCAGGGGTGGAAGGTGCAGGTAGCAGCTAC Qy 2003 TTGGGAGGTGAGGCAGGAAATTAGCAGGGAACAAATTAGCAGGAACAAAA 1381 TTGGGAGGCTGAGGAAAATTAGCAAAATTAGCAAAAAAAA

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RS Strausberg,R.L., Feingold,E.A., Grouse,L.H., Derge,J.G.,

Klausner,R.D., Collins,F.S., Wagner,L., Shemmen,C.M., Schuler,G.D.,

Altschnl,S.F., Zeeberg,B., Buetow,K.H., Schaefer,C.F., Bhat,N.K.,

Hopkins,R.F., Jordan,H., Moore,T., Max,S.I., Wang,J., Hsieh,F.,

Diatchenko,L., Marusina,K., Farmer,A.A., Rubin,G.M., Heng,L.,

Stapleton,M., Soares,M.B., Bonaldo,M.F., Casavant,T.L.,

Scheetz,T.E., Brownstein,M.J., Usdin,T.B., Toshiyuki,S.,

Carninci,P., Prange,C., Raha,S.S., Loquellano,N.A., Peters,G.J.,

Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,

Abramson,R.D., Mullahy,S.J., Bosak,S.A., McEwan,P.J.,

McKernan,K.J., Malek,J.A., Gunaratne,P.H., Richards,S.,

Worley,K.C., Hale,S., Garcia,A.M., Gay,I.J., Hulyk,S.W.,

Villalon,D.K., Muzny,D.M., Sodergren,E.J., Lu,X., Gibbs,R.A.,

Fahey,J., Helton,E., Ketteman,M., Madan,A., Rodrigues,S.,

Sanchez,A., Whiting,M., Madan,A., Young,A.C., Shevchenko,Y.,

Bouffard,G.G., Blakesley,R.W., Touchman,J.W., Green,E.D.,

Dickson,M.C., Rodriguez,A.C., Grinwood,J., Schmutz,J., Myers,R.M.,

Butterfield,Y.S., Krzywinski,M.I., Skalska,U., Smailus,D.E.,

Schnerch,A., Schein,J.E., Jones,S.J. and Marra,M.A.

Generation and initial analysis of more than 15,000 full-length

human and mouse cDNA sequences

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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 10190699.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site: http://www.nisc.nih.gov/
Contact: nisc_mgc@nhgri.nih.gov
Akhter,N., Ayele,K., Beckstrom-Sternberg,S.M., Benjamin,B.,
Blakesley,R.W., Bouffard,G.G., Breen,K., Brinkley,C., Brooks,S.,
Blakesley,R.W., Bouffard,G.G., Breen,K., Gupta,J., Haghighi,P.,
Hansen,N., Ho,S.-L., Karlins,B., Kwong,P., Laric,P., Legaspi,R.,
Maduro,Q.L., Massello,C., Maskeri,B., Mastrian,S.D.,McCloskey,J.C.,
McDowell,J., Pearson,R., Stantripop,S., Thomas,P.J., Touchman,J.W.,
Tsurgeon,C., Vogt,J.L., Walker,M.A., Wetherby,K.D., Wiggins,L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis Staudt
cDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: National Institutes of Health Intramural
Sequencing Center (NISC),
Gaithersburg, Maryland;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NIH-MGC Project URL: http://mgc.nci.nih.gov
On Aug 19, 2003 this sequence version replaced gi:13623400
Contact: MGC help desk
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ATAGAGAAGGAACACAGGTCTGGCCAGGGACGTGCTGCAATTGGTGCAGTTTTGAATGCA
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Pred. No. 0;
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Patent: JP 2001245669-A 1 11-SEP-2001;

JAPAN TOBACCO INC, TASUKU HONJO

OS Mus musculus (mouse)

PV 19-2001245669-A/1

PD 11-SEP-2000

PV 200124569-A/1

PI TASUKU HONJO, MASAMICHI MURAMATSU

PC C12N15/09, A61X39/395, A61K39/395, A61P1/00, A61P11/06, A61P13/12,

PC A61P17/02, A61P27/16, A61P37/02, A61P37/08, C07K16/18, C12N1/19, PC

C12N1/21,

PC C12N1/21,

PC C12N5/10, C12N9/78, C12P21/02, C12P21/08// (C12N1/21, C12R1:19), PC

C12N5/10, C12R1:91), C12N15/00, C12N9/00, C12R1:91) CC

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Mammalia; Eutheria; Roden
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Honjo,T. and Muramatsu,M.
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nilarity 69.4%;
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Muramatsu,M., Sankaranand,V.S., Anant,S., Sugai,M., Kinoshita,K., Davidson,N.O. and Honjo,T.
Specific expression of activation-induced cytidine deaminase (AID) a novel member of the RNA-editing deaminase family in germinal
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Yoshida Sakyo-ku, Kyoto 606-8501, Japan
Location/Qualifiers
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/db_xref="GI:5305728"
/translation="MD5LLMKOKKFLYHFKNVRWAKGRHETYLCYVVKRRDSATSCSL
/brghlenksgchvellflrxisdwdldpgrcyrvtwffswspcydcarhvasflrwnp
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Submitted (17-dTL-2002) Cell Biology, Albert Einstein College of Submitted (17-dTL-2002) Cell Biology, Albert Einstein College of Medicine, 1300 Morris Park Ave. Chanin 404, Bronx, NY 10461, USA
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Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
  ATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCAATTCAAAAATGTCCGCTGG
                                                                                       AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTCTGTGAGGACCGCAAG
                                                                                                                                                                           TTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG
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                                                                AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTCTGTGAGGACCGCAAG
                                                                                                                                                TTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG
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ilarity 99.8%;
Conservative
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/product="AID"
/protein_id="AAM95415.1"
/protein_id="AAM95415.1"
/db_xref="GI:22297244"
/translation="MDSLLMNRRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL
DFGYLRNKNDCHVELLFLRYISDWDLDFGRCYRVTWFTSWSPCYDCARHVADFLRGNP
NLSLRIFTARLYFCEERKAEEPEGLRRLHRAGQQIAIMTFKDYFYCWNTFVENHERTFK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AWEGLHENSVRLSRQLRRILLPLYEVDDLRDAFRTLGL"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type≈"mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /mol_type="mRNA"
/db_xref="taxon:10090"
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Rodentia;
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Pred. No. 2.2e-106;
0; Mismatches 1;
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forms: with and without stop-codon (to allow fusion with C-terminal	Match 21.1%; Score 595; DB 9; Length 597;	Query Ma
JOURNAL Submission  JOURNAL Submitted (13-MAY-2003) BD Biosciences Clontech, 1020 East Meadow Circle, Palo Alto, CA 94303, USA  COMMENT This CDS clone is a part of a collection of human full length expression clones generated by BD Biosciences Clontech and the	/translation="MDSLLMMRRKFLYQFKMVRMKGRRETYLCYVVKRADSATGFSLDGFTSLLMKNGGCHVELLFLRYISDMDLDFGRCYRVTWFTSWSPCYDCARHVADFLRGNPNLSIRIFARLYFGEDRKASPSGLÆRLHFAGVQLAIMTFXDYFYCMNTFVENHERTFKAWEGLHENSVRLSRQLRRILLFLYEVDDLRDAFRTLGL"	ORIGIN
	1597 /codon_start=1 /product="activation-induced cytidine deaminase" /protein id="AAP3666.1" /db_xref="GI:30583643"	CDS
M (M	ion" st="DH5alpha Tl resistant" Vector: pDNR-Dual"	
	mRNA'	
ÖÖ		FEATURES source
DEFINITION Synthetic construct Homo sapiens activation-induced cytidine deaminase mRNA, partial cds.  ACCESSION BT008226 1 GI:30585290  VERSION BT008226 1 GI:30585290	and before 'ATG' to provide Kozak consensus sequence; 'GG' after last codon and before HindIII site to maintain reading frame.  Clone distribution: http://bioinfo.clontech.com/orfclones.	
BT008226 597 bp mRNA linear	forms: with and without stop-codon (to allow fusion with C-terminal tag). The CDS has been directionally cloned using BD In-Fusion(TM) cloning system between the Sall and HindII sites of the pDNR-DUAL and HindIII sites of the pDNR-DUAL tags.	
Db 541 TIGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTGGGACTTT 595	This CDS clone is a part of a collection of human full length expression clones generated by BD Biosciences Clontech and the	COMMENT
QY 620 TIGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTGGGACTTT 674	Submitted (13-MAY-2003) BD Biosciences Clontech, 1020 East Meadow Circle, Palo Alto, CA 94303. USA	JOURNAL
OY 560 GCCTGGGAAGGGCTGCATGAAAATTCAGTTCCTCTCCAGACAGCTTCGGCGCATCCTT 619	Kalnine,N., Chen,X., Rolfs,A., Halleck,A., Hines,L., Eisenstein,S., Koundinya,M., Raphael,J., Moreira,D., Kelley,T., LaBaer,J., Lin,Y., Phelan,M. and Farmer,A.	AUTHORS
421 TTCAAAGATTATTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAGAACTTTCAAA 48	1 1 to 597)	JOURNAL REFERENCE
500 TTCAAAGATTATTTTTACTGGAATACTTTTGTAGAAAACCATGAAAGAACTTTCAAA	Farmer, A.  man full-length CDSs in BD Creator(TM) System Donor	TITLE
QY 440 GCTGAGCCCGAGGGGCTGCGGGGGGGGGGGGGGGGGGGG	1 to 597) ., Chen, X., Rolfs, A., Halleck, A., Hines, L., Eisenstein, S, M., Raphael, J., Moreira, D., Kellev, T., LaBaer, J., Lin, Y	REFERENCE AUTHORS
301 AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTCTGTGAGGACCCGCAAG	sapiens ryota; Me alia; Euti	ORGANISM
OV 380 AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTTCTGTGAGGACCGAAG 439	18	KEYWORDS SOURCE
320 TTCACCTCCTGGAGGCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG	4402 4402   GT.30583542	ACCESSION VERSION
Qy 260 TICCTCCGCTACATCTCCGGACTGGGACCTAGACCCTGGCCGCCTCCACCTGG 319	BT007402 Homo sapiens activation-induced cytidine deaminase mRNA, complete	RESULT 12 BT007402 LOCUS DEFINITION
QY 200 TCCTTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGGCTGCCACGTGGAATTGCTC 259	TIGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTGGGACTTTGA	
Qy 140 GCTAAGGGTCGGCGTGAGACCTACCTGTGCTACGTAGAGAGGGGTGACAGTGCTACA 199		
Db 1 ANGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCAATTCAAAAATGTCCGCTGG 60	421 TTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAAGAACTTTCAAA 480 560 GCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCCCAGACAGCTTCGGCGCATCCTT 619	δ β
Hest Local Similarity 100.0%; Pred. No. 2.6e-106; Matches 595; Conservative 0; Mismatches 0; Indels 0; Gaps	361 GCTGAGCCCGAGGGGCTGCGGCGGCTGCACCGCGGGGGTGCAAATAGCCATCATGACC 420 500 TTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAGAACTTTCAAA 559	AD QC

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FEATURES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                         TTGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTTGGGACTTT
                                                                                                        GCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCTCCAGACAGCTTCGGCGCATCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTTTTCACTGGACTTTGGGTAATCTTCGCAATAAGAACGGCTGCCACGTGGAATTGCTC
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                                                                           GCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCTCCAGACAGCTTCGGCGCATCCTT
                                                                                                                                                      TTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAGAACTTTCAAA
                                                                                                                                                                                 TTCAAAGATTATTTTTACTGCTGGAATACTTTTTGTAGAAAACCATGAAAGAACTTTTCAAA
                                                                                                                                                                                                                                 GCTGAGCCCGAGGGGCTGCGGCGGCGCGCGGGGGTGCAAATAGCCATCATGACC
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/db_xref="GI:30595291"
/db_xref="GI:30595291"
/translation="MOSLIMNRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL
DFGYLRNKNGCHVELLFLRYISUWDLDEGRCYRVTWFTSWSPCYDCARHVADFLRGNP
NLSLRIFTARLYFCEDBKAEPFGLRRLHRAGVQLAIMTFKDYFYCWNTFVENHERTFK
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/ml_type="mRNA"
/db_xref="taxon:32630"
/clone="GH00009L1.0"
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=="Vector: pDNR-Dual"
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Pred. No. 2.6e-106;
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Matches 595;
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Martin,A. and Scharff,M.D.
Martin,A. and Scharff,M.D.
Somatic hypermutation of the AID transgene in B and non-B
Proc. Natl. Acad. Sci. U.S.A. 99 (19), 12304-12308 (2002)
2 (bases 1 to 596)
Martin,A. and Scharff,M.D.
Direct Submission
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AF529815
AF529815.1 GI:22297217
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Mammalia; Eutheria;
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                                                                                                                                                            TTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG
                   GCTGAGCCCGAGGGGCTGCGGCGCTGCACCGCGCGCGGGTGCAAATAGCCATCATGACC
                                                           AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTCTGTGAGGACCGCAAG
                                                                                 AACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTACTTCTGTGAGGACCGCAAG
                                                                                                                                    TTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /translation="MDSLLMNRRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /product="AID"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              'gene="AID"
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mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   codon_start=1
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Primates;
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Pred. No. 3.4e-106;
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ve. Chanin 404, Bronx, NY 10461, USA
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200 TCCTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGGCTGCCACGTGGAATTGCTC 259	140 GCTAAGGGTCGGCGTGAGACCTACCTGTGCTACGTAGTGAAGAGGCGTGACAGTGCTACA 199	80 ATGGACAGCCTCTIGATGAACCGGAGGAAGTTTCTTACCAATTCAAAAATGTCCGCTGG 139	/ Match 21.1%; Score 594.4; DB 9; Length 596; Local Similarity 99.8%; Pred. No. 3.4e-106; Pes 595; Conservative 0; Mismatches 1; Indels 0; Gaps 0;	/gene="AID" /note="integrated into Burkitt's lymphoma cell line Ramos" /note="integrated into Burkitt's lymphoma cell line Ramos" /codon_start=1 /product="AID" /product="AID" /protein_id="AAM95403.1" /brotein_id="AAM95403.1" /db_xref="gi12297220" /translation="MDSILMNRRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL /translation="MDSILMNRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL /translation="MDSILMNRKFLYQFKNVRWAKGRRETYLCYVVKRRDSATSFSL /translation="MDSILMNRKFLYQFKNVRWAKGRRETYLCYVKRRDSATSFSL /translation="MDSILMNRKFLYGFKNVRWAKGRRETYLCYVKRRDSATSFSL /translation="MDSILMNRKFLYGFKNVRWAKGRRETYLGL"" /***********************************		recutting, 1990 routes Fair Ave. Chanth 404, BIOHX, NI 10481, US LOCATION/Qualifiers e 1. 596	Direct Submission  Submitted (17-JUL-2002) Cell Biology, Albert Einstein Colle  Wedicine 1300 Worris Dark Ave Charin 100 Brown NV 1000	Martin, A. Somatic h Proc. Nat 2 (bases			620 TIGCCCCIGTATGAGGTIGATGACTTACGAGACGCATTICGTACTITGGGACTITG 675	481 GCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCCTCCCAGACAGA	21 TCAAAGATTATTTTACTGCTGGAATACTTTTGTAGAAAACCATGAAAGAACTTTCAAA	ម ម	361 GCTGAGCCCGAGGGGCTGCGGCGGCTGCACCGCGCGGGGTGCAAATAGCCCATCATGACC 420

Search completed: March 7, 2004, 09:57:47 Job time : 10908 secs

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Result
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Maximum Match 100%
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Gapop 10.0 , Gapext 1.0
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11315.144 Million cell updates/sec
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Copyright (c) 1993 - 2004 Compugen Ltd
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AAK61819
AAL02789
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ABA08208
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ABA15724
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ADB88952
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ABS73287
ABS73288
AAC55314
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ABA15431
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ADA98470
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                                                  ARK91088 Human Lum.
Aac55307 Mouse act
Adb88952 AID gene
Aak81089 Human imm
Aak611819 Human imm
Aal02789 Human reg
Aal07516 Human reg
Aba08208 Human ov
Acf42745 Human A
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Aac55314 Human act
Aac55339 Human act
Abs73286 DNA encod
Aac55319 Human act
Abs05468 Human nov
         Aak67239
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Aas42122	Ab167668	Ab164414	Ab162910	Abk86229	Abk86220	Abk86221	Abk86218	Ada98730	Abz74201	Abz67767	Aas41759	Aba96614	Abq88117	Ab197583	Aal04676	Abq88207	Aak71358	Ade11169	Adc85343	Adb72602	10040000
Genomic	Oesophagı	Stomach c	Breast ca	AIP-1/FLA	AIP-1/FLA	AIP-1/FLA	DNA encod	Human sec	Secreted	Human sec	Genomic s	Human alp	Human ost	Human tes	Human rep	Human ost	Human imm	Human tra	Mouse Itp	Human ITP	TIGHTE TIE

## ALIGNMENTS

AAC55312 standard; cDNA; 2818 BP.

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24-JUN-1999;
27-DEC-1999;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-OCT-2000.
                                                                                                                                                                                                                                    (/LNOH)
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                                                                                                                                                                                                                                    JAPAN TOBACCO INC.
HONJO T.
                                                                                                                                                    Muramatsu
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/product= "activation-induced
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WPI; 2000-611715/58. P-PSDB; AAB24198.

The present sequence encodes human activation-induced cytidine deaminase (C (AID). AID structurally relates to an RNA editing enzyme APOBEC-1 and has cytidine activity similar to APOBEC-1. AID has antiallergic, antianaemic, antiasthmatic, ophthalmological, anti-HIV and dermatological activities, and can be used in gene therapy. AID polymucleotides are useful in methods for identifying drugs for the treatment of B cell associated immune system disorders, immunodeficiency diseases and allergies, such as immunoglobulin A (IgA) deficiency disease, IgA nephritis, gamma-c globulinaemia, atopic dermatitis, allergic colitis, asthma, food allergy, allergic rhinitis, Rosen disease, DiGeorge disease, ataxia telangiectasia, common variable immunodeficiency disorder, MHC (major histocompatibility class) class II deficiency disease, AIDS (auto c immunodeficiency syndrome), elevated IgE disorder, and IgG subclass selection disorder. The DNA sequences encoding AID may be used for gene c therapy and the antibodies to the AID protein may be used for diagnosis of the autopaters. Query Match Best Local Matches 2818; Sequence Nucleic acid encoding target for drug develo Claim 3; Page 135-139; 174pp; Japanese Local Similarity 241 241 181 181 601 541 541 481 481 421 301 301 121 121 109 421 361 361 9 9 AGAGAACCATCATTAATTGAAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGCAAGA 2818 BP; 868 A; 548 C; 626 G; 776 AGACACTCTGGACACCACTATGGACAGCCTCTTGATGAACCGGAAGGTTTCTTTACCA ACAGCTTCGGCGCATCCTTTTGCCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCG ACAGCTTCGGCGCATCCTTTTGCCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCG CCATGAAAGAACTTTCAAAAGCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCCCAG GCAAATAGCCATCATGACCTTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAA GCAAATAGCCATCATGACCTTCAAAGATTATTTTTACTGCTGGAATACTTTTTGTAGAAAA GGCCGACTTTCTGCGAGGGAACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTA CTGCTACCGCGTCACCTGGTTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGT CTGCCACGTGGAATTGCTCTTCCTCCGCTACATCTCGGACTGGGACCTAGACCCTGGCCG GAGGCGTGACAGTGCTACATCCTTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGG GAGGCGTGACAGTGCTACATCCTTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGG AGACACTCTGGACACCACTATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCA AGAGAACCATCATTAATTGAAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGCAAGA CCATGAAAGAACTTTCAAAGCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCTCCAG GECCGACTTTCTGCGAGGGAACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCCTCTA CTGCTACCGCGTCACCTGGTTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGT CTTCTGTGAGGACCGCAAGGCTGAGCCCGAGGGGCTGCGGCGGCTGCACCGCGCGGGGT Conservative development for 100.0%; activation induced cytidine deaminase, useful poment for immune-related diseases including 0 Score Pred. Mismatches No. 0; DB T; 0 U; 0 Other; 0; ω •• Indels Length 0; Gaps as 540 540 480 480 420 300 120 60 660 660 600 600 420 360 360 300 240 180 120 60 240 0 밁 Ś 밁 Ş 밁 Ś Ś Ş 문 Ś 맑 Ş Ś 밁 밁 Ś 밁 밁 Ś 밁 8 片 8 ᅜ 8 뮍 S 片 Ś 밁 8 맑 Ś 멂 Š 밁 S 1681 1621 1621 1561 1501 1441 1441 1381 1381 1321 1261 1141 1141 1021 1561 1501 1321 1261 1201 1201 1081 1081 1021 961 901 841 841 199 961 901 781 781 721 721 AAACTCTTTTAAGGAAGTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTA GACCATGCATGGTCACCTTCAAGCTACTTTAATAAAGGATCTTAAAAATGGGCAGGAGGAC GACCCCAPACCATCTCTCCCAAAGCATTAATATCCAATCATGCGCTGTATGTTTTAATCAG TACTTTGGGACTTTGATAGCAACTTCCAGGAATGTCACACACGATGAAATATCTCTGCTG GEGTCTCTTCATCTCAGAAATGCCAATCAGGTCAAGGTTTGCTACATTTTGTATGTGTGT GCAAACAATTGGAAGGAAGTTGCTTGAATGTTGGGGAGAGGAAAATCTATTGGCTCTCGT GACCATGCATGGTCACCTTCAAGCTACTTTAATAAAGGATCTTAAAAATGGGCAGGAGGAC AAACTCTTCCATCAGGCCATGATCTATAGGACCTCCTAATGAGAGTATCTGGGTGATTGT GTGAGAGGATCAAATGTTTTTATATCAACATCCTTTATTATTTGATTCATTTGAGTTAAC GCAACATTGTCCCCTACTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGT GATGCTTCTCCCAAAGGTATATTAACTATATAAGAGAGTTGTGACAAAACAGAATGATAA GATGCTTCTCCCAAAGGTATATTAACTATATAAGAGAGTTGTGACAAAACAGAATGATAA GCAAACAATTGGAAGGAAGTTGCTTGAATGTTGGGAGAGAAAAATCTATTGGCTCTCGT GACCCCAAACCATCTCTCCAAAGCATTAATATCCAATCATGCGCTGTATGTTTTAATCAG AAACTCTTCCATCAGGCCATGATCTATAGGACCTCCTAATGAGAGTATCTGGGTGATTGT AGTGGTGTTAGTGATAGATTTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACAC AGTGGTGTTAGTGATAGATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACAC GTGAGAGGATCAAATGTTTTTATATCAACATCCTTTATTATTTGATTCATTTGAGTTAAC CAACGITITI CAACGITITITCTATGACTITTAGGIAGGATGAGAGCAGAAGGIAGATCCTAAAAAGCAIG GCAACATTGTCCCCTACTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGTGT AAAATAGAGAAGGAACACAGGTCTGGCCAGGGACGTGCTGCAATTGGTGCAGTTTTGAAT AAAATAGAGAAGGAACACAGGTCTGGCCAGGGACGTGCTGCAATTGGTGCAGTTTTGAAT TTTCTTAGAGTTTACAGAAAAATATTTATATACGACTCTTTAAAAAGATCTATGTCTTG AAGACAGTGGATAAAAACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCAC TGTGAACAAGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGC TGTGAACAAGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGC <u>AAGACAGTGGATAAAAAACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCAC</u> CTATGACTTTTAGGTAGGATGAGAGCAGAAGGTAGATCCTAAAAAGCATG TTACAGAAAAATATTTATATACGACTCTTTAAAAAGATCTATGTCTTG 1740 1680 1680 1620 1620 1440 1380 1380 1320 1260 1200 1080 1080 1020 1020 1560 1560 1500 1500 1440 1140 960 960 900 900 840 840 780 780 720

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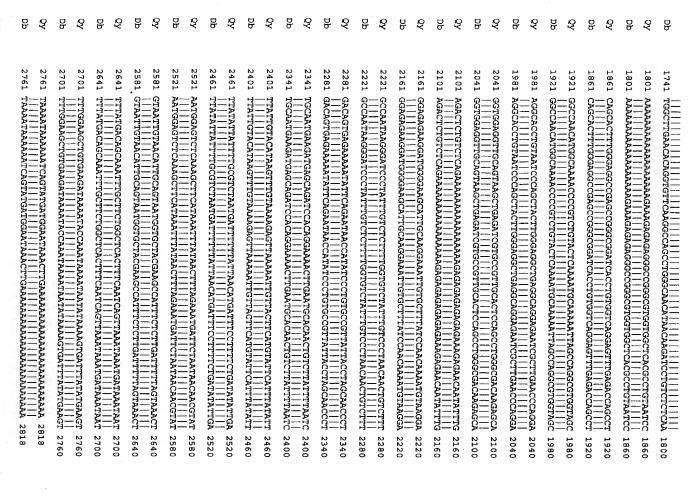
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Disclosure; Page 246-247; 389pp; English.
                                                                                                                                                                                                                                                                                                                 Treating genetically-defined disease associated with chromosomal aberrations yielding oncogenic fusion proteins, e.g. cell prolif diseases, involves administering an inhibitor of heat shock prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chromosome aberration; oncogenic fusion protein; cancer; proliferative disease; cellular protein isoform; heat shock protein isoform; heat shock protein isoform; heat shock protein isoform; heat shock protein isoform; theumatoid arthritis; cancer; haematopoietic disorder; T cell lymphona; B cell lymphona; b cell lymphona; b cell lymphona; chronic myelomid leukaemia; CMML; acute myeloid leukaemia; AML; chronic myelomonocytic leukaemia; CMML; acute lymphoblastic leukaemia; ALL; APL; NHL; solid tumour; papillary thyroid carcinoma; Ewing's sarcoma; melanoma; liposarcoma;
                                                                                                                                                                                                                                                                   The invention describes a method of treating
                                                                                                                                                                                                                                                                                                                                                                                                           Fritz LC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            01-MAR-2001; 2001US-0272751P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DNA encoding human translocation del(12p)
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DB; ABG95083.
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                                                                                                                                                                                                                                                                                                                   cell proliferative shock protein 90.
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CC associated with chromosomal aberrations yielding oncogyi critical proteins (I), treating cancerous cells containing (I) in a heterogeneous CC cell population, treating protein cells containing (I) in a heterogeneous CC (ell) population, treating protein isoforms (II) dependent on heat shock protein (CRISP)-90, or selectively treating cells expressing (II) involving CC administering HSP90-inhibitor. The method is useful for treating CC genetically-defined disease with chromosomal aberration yielding CC oncogenic fusion protein, treating cancerous cells containing fusion CC protein in heterogeneous cell population, treating proliferative disease CC (e.g. rheumatoid arthritis or cancer) associated with mutant protein or CC protein isoform dependent on heat shock protein (HSP)-90 (e.g. CP3), or selectively treating cells expressing mutant protein or cellular protein isoform in a patient heterozygous for (II). The method is useful CC protein isoform in a patient heterozygous for (II). The method is useful CC urating a disease e.g. haematopoietic disorder such as T or B cell C lymphoma, chronic myeloid leukaemia (CML), APL, ALL, AML, NHL and CMML, CC or a disease characterised by a solid tumour such as papillary thyroid Carcinoma, Emigy's sarcoma, melanoma, liposarcoma, rhabdomyosarcoma and CC synovial sarcoma. The method is also useful for treating viral infections. This represents the DNA sequence of a chromosome aberration or cell of the content of the

Sequence 2791 BP; 842 A; 548 C; 625 G; 776 T; 0 U; 0 Other;

Similarity

99.0%;

Score 2791; Pred. No. (

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Length

2791;

Ś 밁 \$ Query Match Best Local S Matches 2791 GAACCATCATTAATTGAAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGGGGCCAAGAAGA Conservative 0 Mismatches , , Indels 0, 60 63

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CACTCTGGACACCACTATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCAATT

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RESULT

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     WPI; 2002-698710/75.
P-PSDB; ABG95084.
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The invention describes a method of treating genetically-defined disease associated with chromosomal aberrations yielding oncogenic fusion CC proteins (I), treating cancerous cells containing (I) in a heterogeneous Cc cell population, treating proliferative diseases associated with mutant CC (HSP)-90, or selectively treating cells expressing (II) involving CC administering HSP90-inhibitor. The method is useful for treating CC administering HSP90-inhibitor. The method is useful for treating CC genetically-defined disease with chromosomal aberration yielding CC oncogenic fusion protein, treating cancerous cells containing fusion CC protein in heterogeneous cell population, treating proliferative disease (e.g. rheumatoid arthritis or cancer) associated with mutant protein or CC cellular protein isoform dependent on heat shock protein (HSP)-90 (e.g. CC p53), or selectively treating cells expressing mutant protein or cellular CC protein isoform in a patient heterozygous for (II). The method is useful CC protein isoform in a patient heterozygous for (II). The method is useful CC protein isoform in patient heterozygous for (II). The method is cell CC protein isoform in patient heterozygous for (II). The method is useful CC carcinoma, Chronic myeloid leukaemia (CML), APL, ARL, AML, NHL and CML, CC or a disease characterised by a solid tumour such as papillary thyroid CC carcinoma, Employers and method is also useful for treating viral confections. This represents the DNA sequence of a chromosome aberration or confections. This represents the DNA sequence of a chromosome aberration
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Treating genetically-defined disease associated with chromosomal aberrations yielding oncogenic fusion proteins, e.g. cell prolif diseases, involves administering an inhibitor of heat shock prot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Disclosure; Page 248-249; 389pp; English.
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Query Match Best Local Sim Matches 2791; Sequence 2791 BP; 842 A; 548 C; 625 G; 776 T; 0 U; 0 Other; 99.0%; Score 2791; Pred. No. 0; DB ٠. م Length

Similarity

Conservative

<u>,</u>

Mismatches

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Indels

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Gaps

0

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541

TGAAAGAACTTTCAAAGCCTGGGAAGGGCTGCATGAAAATTCAGTTCGTCTCTCCAGACA

	Qy 1624 GCTTCTCC Db 1621 GCTTCTCC	Qy 1564 TCTCTTCA	Qy 1504 AACAATTG          Db 1501 AACAATTG	QY 1444 CTCTTTA	Qy 1384 GAACAAGA          Db 1381 GAACAAGA	Oy 1324 CATGCATG           Db 1321 CATGCATG	Qy 1264 AAGCATGTT	QY 1204 CCCAAACCAT	Oy 1144 CTCTTCCAT               Db 1141 CTCTTCCAT	Qy 1084 GGTGTTAG          Db 1081 GGTGTTAG	OY 1024 AGAGGATCAAATGTT	Oy 964 CGTTTTTCTATGACT	Qy 904 ACATIGICCC	Qy 844 ATAGAGAA            Db 841 ATAGAGAA	Qy 784 CTTAGAGT	Qy 724 ACAGTGGA          Db 721 ACAGTGGA	Qy 664 TTTGGGACT	Db 601 GCTTCGGC
	CTTCTCCCAAAGGTATATTAACTATATAAGAGAGTTGTGACAAAACAGAATGATAAAG 	CTCTTCATCTCAGAAATGCCAATCAGGTCAAGGTTTGCTACATTTTGTATGTGTGTG	aacaattggaaggaagttgcttgaatgttggggagaggaaaatctattggctctcgtgg 	TAAGGAAGTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTAGC 	CARGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAA 	TGGTCACCTTCAAGCTACTTTAATAAAGGA 	TTTATG	atototogaaggattaatatogaatgatggggtg 	CAGGCCATGATCTATAGGAC                   CAGGCCATGATCTATAGGAC	AGTGATAGATTTTTCTATTCTTTTCCCT 	TTTATATCAACATC             TTTATATCAACATC	atgactttaggtaggatgagagcaga 	CCCTACTGGGAATAACAGAACTGCAGGA 	TAGAGAAGGAACACAGGTCTGGCCAGGGACGTGCTGCAATTGGTGCAGTTTTGAATG 	TTAGAGTTTACAGAAAAAATATTTATATACGACTCTTTAAAAAGATCT 	CAGTGGATAAAAACAGTCCTTCAAGTCTTCTCCCCCAGTGGATAAAAAAAA	TGGGACTTTGATAGCAACTTCCAGGAATGTCACACACGATGAAATAT 	CTTCGGCGCATCCTTTTGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTA
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AATAAAAATCAGTATGATGGAATAAACTTG 2794	GGAAGCTGTGAAGATAAAATACCAAATAAATAATATATAAAGTGATTTATTATAGAAGTTAA 	ATGACAGCAAATTTGCTTCTGGCTCACTTTCAATCAGTTAAATGATAAATGATAATTATTTT	ATTGTAACATTGCAGTAATGGTGCTACGAAGCCATTTCTCTTTAATTTTAAGTAACTTTT	GAGTTCCAAAGCTTCATAAATTTATAACTTTAGAAATGATTCTAATAACAACGTATGTA	TATTATTTTIGGETCIAATGATTTTTTATTAACATGATTTCCTTTTCTGATATTGAAAT TATTATTTTTGGETCTAATGATTTTTTATTAACATGATTTCCTTTTCTGATATATTGAAAT	TTGTACATAAGTTTGTAAAAGAGTTAAAAATTGTTACTTCATGTATTCATTTATATTTTA	ANTIGATION CONTRACTOR OF THE CONTRACT OF THE C	AS ISAMAMAN AT ICHGAATAACCATA ICCIGICGUG TATTACCAACCCTIGCAACCCTTGC AGTGAGAAAAATTCGGAATAACCATATCCCTGTGCCGTTATTACCTAGCAACCCTTGC AGTGAGAAAAAATTCGAAATAACCATATCCCTGTGCCGTTATTACCTAGCAACCCTTTGC	ATTAGGGATICCCTATTTGCCCCTTTTGGTCCCTATTTGTCCCTAACAACTGTCTTTGAC AATTAGGGATICCCTATTTGTCTCTTTTGGTCTCTATTTGTCCCTAACAACTGTCTTTGAC AATTAGGGATCCCTATTTGTCTCTTTTGGTCTCTATTTTGTCCCTAACAACTGTCTTTTGAC AATTAGGGATCCCTATTTGTCTCTTTTGACTGTCTCTTTTGAC	GAGAAGGATIGGGAAGGATIGGCAAGGAAATTGTGCTTTATCCAACAAAATGTAAGGAGCC GAGAAGGATGGGGAAGCATTGCAAGGAAATTGTGCTTTATCCAACAAAATGTAAGGAGCC		GEAGGITGCAGIAAGCIGAGAICGIGCCGIIGCACICCAGCCIGAGCGAACAAGAGCAAGA	CACCITSTANTCCCAGCINCTITGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGT 	CAACATGGCAAAACCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGCGTGGTAGCAGG		AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	CTTGAACACAGGTGTTCAAGGCCAGCCTGGGCAACATAACAAGATCCTGTCTCTCAAAAA	81 TGCBAACCGTGGCACACGCTCATAGTTCTAGCTGCTTGGGAGGTTGAGGAGGAGGAGGATGG
	AGTGATT	AATAAATO	TIGATITI	ATTCTAATA	CTTTTCTC	ATGENTIC	ACTGTCTT	TAITACCT	CCCTAACA	CCAACAA	3AAAGAGAA 	3000000 	ATCGCTTG	TAGCCAGG	GAGTTIGA	GCTCACGC	CAAGATCCT	BAGGTTGAG

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                                                                                                                                            The present invention describes an activation-induced cytidine deaminase (AID). AID structurally relates to an RNA editing enzyme APOBEC-1 and has cytidine activity similar to APOBEC-1. AID has antiallergic, antianaemic, cytidine activity similar to APOBEC-1. AID has antiallergic, antianaemic, cand can be used in gene therapy. AID polymucleotides are useful in comethods for identifying drugs for treatment of B cell associated immune system disorders, immunodeficiency disease and allergies, such as cimmunoglobulin A (IgA) deficiency disease, IgA nephritis, gammacci plobulinaemia, atopic dermathitis, allergic colitis, asthma, food allergy, commune glalergy, allergic rhinitis, Rosen disease, DiGeorge disease, ataxia cellangiectasia, common variable immunodeficiency disease, AIDS (auto compatibility class) class II deficiency disease, AIDS (auto compatibility class) class II deficiency disease, AIDS (auto compatibility class) class II deficiency disease, and IgG subclass selection disorder. The DNA sequences encoding AID may be used for gene cuterapy and the antibodies to the AID protein may be used for diagnosis content on the sequence of human arm
  Query Match
Best Local Similarity
Matches 2177; Conserv
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24-JUN-1999;
27-DEC-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    immune related disease; allergy; allergic disease; antiallergic; antianaemic; antiasthmatic; ophthalmological; anti-HIV; dermatcological; gene therapy; B cell associated immune system disorder; food allergy; immunodeficiency disease; immunoglobulin A deficiency disease; asthma; IgA nephritis; gamma-globulinaemia; atopic dermatitis; allergic colitis; drug allergy; allergic rhinitis; Rosen disease; Digocorge disease; AIDS; ataxia telangicctasia; common variable immunodeficiency disorder; major histocompatibility class II deficiency disease; major histocompatibility class II deficiency disease; auto immunodeficiency syndrome; IgG subclass selection disorder; ds.
                                                                                            Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Claim 17; Page 145-150; 174pp;
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Activation-induced cytidine deaminase; AID; cytidine deaminase; immune related disease; allergy; allergic disease; antiallergic; antianaemic; antiasthmatic; ophthalmological; anti-HIV; dermatological; gene therapy; B cell associated immune system disorder; food allergy; immunodeficiency disease; immunoglobulin A deficiency disease; asthma; IgA mephritis; gamma-globulinaemia; atopic dermatitis; allergic colitis; drug allergy; allergic rhinitis; Rosen disease; DiGeorge disease; AIDS; ataxia telangiectasia; common variable immunodeficiency disorder; major histocompatibility class II deficiency disease; AAC55339 Human activation-induced cytidine deaminase genomic DNA SEQ ID immunodeficiency syndrome; IgG subclass selection disorder; standard; (first entry) DNA; 11204 뫔

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29-MAR-1999; 24-JUN-1999; 27-DEC-1999; 99JP-00087192. 99JP-00178999. 99JP-00371382

JAPAN HONJO TOBACCO INC

Honjo Muramatsu

WPI; 2000-611715/58

Nucleic acid encoding activation induced cytidine deaminase, useful as target for drug development for immune-related diseases including ы

Claim 17; Page 163-170; 174pp; Japanese

The present invention describes an activation-induced cytidine deaminase (AID). AID structurally relates to an RNA editing enzyme APOBEC-1 and has cytidine activity similar to APOBEC-1. AID has antiallergic, antianemic, antiasthmatic, ophthalmological, anti-HIV and dermatological activities, and can be used in gene therapy. AID polynucleotides are useful in methods for identifying drugs for the treatment of B cell associated immune system disorders, immunodeficiency diseases and allergies, such as cimmunoglobulin A (IgA) deficiency diseases and allergies, such as cimmunoglobulina, atopic dermatitis, allergic colitis, asthma, food allergy, allergic rhimitis, Rosen disease, Digeorge disease, ataxia telangiectasia, common variable immunodeficiency disease, MHC (major Chistocompatibility class) class II deficiency disease, AIDS (auto immunodeficiency syndrome), elevated IgE disorder, and IgG subclass colored the antibodies to the AID protein may be used for gene and treatment of these disorders. The present sequence represents a cg genomic DNA sequence of human AID

Sequence 망; 3305 ď 2273 Ç 2373 G; Η, 0 U, 0

Query Match
Best Local Similarity
Matches 2177; Conserv 77.2%; 0 Score 2174.6; Pred. No. 0; Mismatches DB ω ·· Length 11204; ٥, Gaps

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                                                                                                                 The invention describes a method of treating genetically-defined disease cassociated with chromosomal aberrations yielding oncogenic fusion corrections (I), treating cancerous cells containing (I) in a heterogeneous cell population, treating proliferative diseases associated with mutant protein or cellular protein isoforms (II) dependent on heat shock protein (HSP)-90, or selectively treating cells expressing (II) involving administering HSP90-inhibitor. The method is useful for treating cadministering HSP90-inhibitor. The method is useful for treating conceptuation yielding conceptuation fusion protein, treating cancerous cells containing fusion conceptuation in heterogeneous cell population, treating proliferative disease ce.g. rheumatoid arthritis or cancer) associated with mutant protein or cellular protein isoform dependent on heat shock protein (HSP)-90 (e.g. p53), or selectively treating cells expressing mutant protein or cellular protein isoform in a patient heterozygous for (II). The method is useful for treating a disease e.g. haematopoletic disorder such as T or B cell lymphoma, chronic myeloid leukaemia (CML), APL, AML, NHL and CMML, or a disease characterised by a solid tumour such as papillary thyroid carcinoma, Ewing's sarcoma, melanoma, liposarcoma, rhabdomyosarcoma and conficunt infections. The method is also useful for treating viral carcinoma, The method is also useful for treating viral security.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Treating genetically-defined disease associated with chromosomal aberrations yielding oncogenic fusion proteins, e.g. cell proliferative diseases, involves administering an inhibitor of heat shock protein 90.
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29-MAR-1999; 24-JUN-1999; 27-DEC-1999; 99JP-00087192. 99JP-00178999. 99JP-00371382.

(/CNOH) JAPAN TOBACCO INC. HONJO T.

Muramateu

WPI; 2000-611715/58

Nucleic acid encoding activation induced cytidine deaminase, useful as target for drug development for immune-related diseases including Ø

Claim 18; Page 152-153; 174pp; Japanese

The present invention describes an activation-induced cytidine deaminase (C (AID). AID structurally relates to an RNA, editing enzyme APOBEC-1 and has C cytidine activity similar to APOBEC-1. AID has antiallergic, antianaemic, antiasthmatic, ophthalmological, anti-HIV and dermatological activities, and can be used in gene therapy. AID polynucleotides are useful in methods for identifying drugs for the treatment of B cell associated immunoglobulin A (IgA) deficiency diseases and allergies, such as immunoglobulin A (IgA) deficiency disease, IgA nephritis, gamma-cC drug allergic rhinitis, Rosen disease, IgA nephritis, gamma-cC drug allergic, common variable immunodeficiency disease, AIDS (auto immunodeficiency syndrome), elevated IgE disorder, and IgG subclass c selection disorder. The DNA sequences encoding AID may be used for gene therapy and the antibodies to the AID protein may be used for dispossis and treatment of these disorders. The present sequence represents the exon 5 genomic DNA sequence of human AID

Sequence 2172 BP; 702 A; 379 C; 465 G; 626 T; 0 U; 0 Other

Query Match
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, Wang D, Drmanac RT;
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O7-NOV-2001 (first entry)  Human immune/haematopoietic antigen genomic sequence SEQ ID NO:35900.  Human; immune; haematopoietic; immune/haematopoietic antigen; cancer; cyrostatic; gene therapy; vaccine; metastasie; ds.  HOmo sapiens.  W0200157182-A2.  09-AUG-2001.  17-JAN-2001; 2001WG-US00154.  11-JAN-2000; 2000US-0179065P. 04-FEB-2000; 2000US-018664P. 24-FEB-2000; 2000US-018984P. 24-FEB-2000; 2000US-018984P. 24-FEB-2000; 2000US-018984P. 24-FEB-2000; 2000US-018984P. 24-FEB-2000; 2000US-018984P. 24-FUM-2000; 2000US-025515P. 07-JUM-2000; 2000US-025515P. 07-JUM-2000; 2000US-021686P. 28-JUM-2000; 2000US-021686P. 28-JUM-2000; 2000US-021688P. 28-JUM-2000; 2000US-021688P. 21-JUL-2000; 2000US-021689P. 11-JUL-2000; 2000US-021689P. 11-JUL-2000; 2000US-021829P. 26-JUL-2000; 2000US-021829P. 26-JUL-2000; 2000US-022551P. 14-AUG-2000; 2000US-022551P. 14-AUG-2000; 2000US-022551P. 14-AUG-2000; 2000US-022551P. 14-AUG-2000; 2000US-022551P. 14-AUG-2000; 2000US-022556P. 14-AUG-2000; 2000US-022556P.	114 120 120 126 126 126 132 132 133 138 138 138 138 144 144 144 150
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AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I) amino acid sequences given in AAM62170 to AAM91921. (I) have cytostatic activity, and can be used in gene therapy and vaccine production. (I) proteins and polynuclotides may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate (I) expression. For example, they may be used to treat disporders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of (I) by expressing inactive proteins or to supplement the patients own production of (I). Additionally, (I) polynucleotides may be used to produce the secreted (I), by inserting the nucleic acids into a host cell and culturing the cell to express the protein. (I) proteins and polynucleotides may be used to prevent, diagnose and treat immune/haematopoietic-related diseases, especially concers and cancer metastases of haematopoietic artigen genomic to AAK64703 represent human immune/haematopoietic artigen genomic sequences from the present invention. AAK54942 to AAK54950 and AAM82169 represent sequences used in the exemplification of the present invention
Query Match
Best Local Similarity
Matches 1491; Conserv
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99JP-00178999.
99JP-00371382.
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target
                                                                                                                                                                          Nucleic acid encoding activation induced cytidine deaminase, useful as target for drug development for immune-related diseases including
                                                                                                                                                   Claim 3; Page 126-130; 174pp; Japanese.
                                                                                                                           AID structurally relates to an RNA editing enzyme APOBEC-1 and
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cc cylidine activity similar to APOBEC-1. AID has antiallergic, antianaemic, contributed by the second of the seco sequence encodes mouse activation-induced cytidine deaminase

Query Match Best Local Similarity Sequence 2440 BP; 706 A; 546 C; 551 G; Conservative 21.4%; 0 Score 603.4; Pred. No. 1.4 Mismatches 351; 1.4e-95; 636 T; 0 U; 1 Other; 멂 ω •• Indels Length 2440; 92; Gaps

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dtivation-induced cytidine deaminase; cell phenotype;
monoclonal antibody; antigen; cross-reactivity; tumour;
germ warfare agent; toxin; V region.
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DR WPI; 2003-747983/70.

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Induction of mutations in gene expressed in eukaryotic cell useful e.g.

PT to produce antibodies with greater affinity or specificity for antigens

PT e.g. human pathogens by expressing an activation-induced cytidine

PT deaminase gene in cell.

XX

PS Example 4: Fig 6: 73pp: English.
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Example 4; Fig 6; 73pp; English.

The invention relates to the induction of mutations in a gene expressed in a eukaryotic cell, where the gene is operably linked to a promoter and within 2 kb of promoter, by expressing a transgenic activation-induced cytidine deaminase (AID) gene in the cell. The method is useful for producing mutated genes and proteins, determining the effect of a mutation on a protein or cell phenotype, and producing genes and proteins with altered properties. It is especially useful for producing antibodies with altered affinities or specificities for an antigen, or increased/decreased cross-reactivity for a second antigen, or produce antibodies with greater affinity/specificity useful therapeutically to treat tumours, viruses such as Ebola and Lhasa Fever or against germ warfare agents, toxins (e.g. ricin). The method may similarly be used to alter affinity, specificity or cross-reactivity of a monoclonal antibody. This sequence represents the AID gene used in the method of the invention to induce mutations in the sequence.

597

BP;

128 A; 164 C; 155 G; 150

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Matches 597; Conserv
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                                         TTGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTCGTACTTTGGGACTTTGA 676
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6 -MAR 2007 -MAR 2008 - APR 2009	NULT 12  K81089  AAK81089;  AAK81089;  O7-NOV-2001 (firs  O7-NOV-2001 (firs  Human immune/haema  Human; immune; hae  cytostatic; gene t  Homo sapiens.  W0200157182-A2.  09-AUG-2001; 2000U  04-FEB-2000; 2000U
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13-OCT 2000 20-OCT 2000 20-NOV 2000 20-NO	14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 14-SEP-2000; 21-SEP-2000; 25-SEP-2000; 25-SEP-2000; 26-SEP-2000; 27-SEP-2000; 27-SEP-2000; 29-SE
2000US-0244979 2000US-0241785P 2000US-0241785P 2000US-0241786P 2000US-0241808P 2000US-0244817P 2000US-0244817P 2000US-0244817P 2000US-0244817P 2000US-0244477P 2000US-0244477P 2000US-0244526P 2000US-0246526P 2000US-0246526P 2000US-0246528P 2000US-0246528P 2000US-0246529P 2000US-0246611P 2000US-0246613P 2000US-0246613P 2000US-0246613P 2000US-0249212P 2000US-0249212P 2000US-0249213P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-0249214P 2000US-024929P 2000US-024929P 2000US-024929P 2000US-024929P 2000US-024929P 2000US-024929P	000US-0232399 000US-0232399 000US-0232400 000US-0232400 000US-0233064 000US-0233064 000US-0233064 000US-0234224 000US-0234224 000US-0234299 000US-0234997 000US-0234997 000US-0234997 000US-0235834 000US-0235834 000US-0235836 000US-0235836 000US-0236367 000US-0236367 000US-0236369 000US-0236370 000US-0236370 000US-0236370 000US-0236370 000US-0236370

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AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I) amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic cactivity, and can be used in gene therapy and vaccine production. (I) proteins and polynuclotides may be used in the prevention, diagnosis and treatment of diseases associated with inappropriate (I) expression. For example, they may be used to treat disorders associated with decreased expression by rectifying mutations or deletions in a patient's genome that affect the activity of (I) by expressing inactive proteins or to supplement the patients own production of (I). Additionally, (I) polynucleotides may be used to produce the secreted (I), by inserting the nucleic acids into a host cell and culturing the cell to express the protein. (I) proteins and polynucleotides may be used to prevent, diagnose and treat immune/haematopoietic-related diseases, especially cancers and cancer metastases of haematopoietic arigen genomic to AAK64703 to AAK64703 the Apresent human immune/haematopoietic and AAM82169 represent sequences used in the exemplification of the present invention.
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AACAACGTATGTAATTGTAACATTGCAGTAATGGTGCTACGAAGCCATTTCTCTTGATTT
                                                                             GATATATTGAAATGGAGTCTCAAAGCTTCATAAATTTATAACTTTAGAAATGATTCTAAT
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2000US-0256719P.
2000US-0251479P.
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2000US-0251869P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 574;
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RESULT 13
AAK61819
14 - AUG - 2000

15 - AUG - 2000

22 - AUG - 2000

22 - AUG - 2000

23 - AUG - 2000

23 - AUG - 2000
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11-JUL-2000;
14-JUL-2000;
26-JUL-2000;
26-JUL-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
14-AUG-2000;
                                                                                                                                                                                                                                                                                   19-MAY-2000;
07-JUN-2000;
28-JUN-2000;
30-JUN-2000;
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17-MAR-2000;
18-APR-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human; immune; haematopoietic; immune/haematopoietic antigen; cancer; cytostatic; gene therapy; vaccine; metastasis; ss.
                                                                                                                                                                                                                                                              07-JUL-2000;
07-JUL-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human immune/haematopoietic antigen encoding cDNA SEQ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAAATAATTTTGGAAGCTGTGAAGATAAAATACCAAATAAAATAATATAAAAGTGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       standard; cDNA; 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATATGAAGTTAAAATAAAAATCAGTATGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATATGAAGTTAAAATAAAAATCAGTATGATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAATAATTTTGGAAGCTGTGAAGATAAAATACCAAATAAAATAATATAAAAGTGATT
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2000US-0190076P.
2000US-0190076P.
2000US-0198173P.
2000US-0214886P.
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2000US-02174896P.
2000US-02174896P.
2000US-021748P.
2000US-021748P.
2000US-021748P.
2000US-0224518P.
2000US-0225214P.
2000US-0225214P.
2000US-0225214P.
2000US-0225214P.
2000US-0225214P.
2000US-0225279P.
2000US-0225758P.
2000US-0226681P.
2000US-0226681P.
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01-SEP-2000 01-SEP-2000 01-SEP-2000 05-SEP-2000 06-SEP-2000 06-SEP-2000 08-SEP-2000 08-SEP-2000 08-SEP-2000

7 2000US-0229345P 2000US-0229345P 2000US-0229345P 2000US-0229509P 2000US-0239437P 2000US-0230437P 2000US-0231242P 2000US-02312442P 2000US-0231244P 2000US-0231413P 2000US-0231413P 2000US-0232080P 2000US-0232080P

08-SEP-2000; 08-SEP-2000; 08-SEP-2000; 08-SEP-2000;

2000US-0231968P. 2000US-023239PP. 2000US-023239PP. 2000US-0232399P. 2000US-0232400P. 2000US-0232400P. 2000US-0233063P. 2000US-0233064P.

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                                                                                                                                                                                                                               amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic CC activity, and can be used in gene therapy and vaccine production. (I) CC proteins and polynucleotides may be used in the prevention, diagnosis and CC treatment of diseases associated with inappropriate (I) expression is an expression. For CC example, they may be used to treat disorders associated with decreased CC expression by rectifying mutations or deletions in a patient's genome that affect the activity of (I) by expressing inactive proteins or to supplement the patients own production of (I). Additionally, (I) concern the patients own production of (I). Additionally, (I) concern the bost cell and culturing the cell to express the cultic acids into a host cell and culturing the cell to express the concern and treat immune/haematopoietic diseases, especially concers and cancer metastases of haematopoietic daringer genomic to AAX87694 represent human immune/haematopoietic antigen genomic sequences from the present invention. AAX64942 to AAX64950 and AAM82169
                                                                                                                                                                  Query Match
Best Local S
Matches 429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         01-DEC-2000
01-DEC-2000
05-DEC-2000
05-DEC-2000
05-DEC-2000
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08-DEC-2000
08-DEC-2000
08-DEC-2000
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17-NOV-2000;
17-NOV-2000;
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17-NOV-2000;
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17-NOV-2000;
17-NOV-2000;
                                                                                                                                                                                                                             Sequence 429 BP; 144
                                                                                                                                                                                                                                                 sequences from the present invention. AAKS4942 to AAKS4950 and AAM82169 represent sequences used in the exemplification of the present invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Claim 1; SEQ ID NO 6879; 3071pp + Sequence Listing; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nucleic acids encoding human immune/hematopoietic antigen polypeptides, useful for preventing, diagnosing and/or treating cancers and metastasis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB; AAM89038.
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                                                                                                                                        1386
1506 CARTIGGAAGGAAGTIGCTIGAATGTIGGGGAGAGAAAATCIATIGGCTCTCGIGGGTC
                                                                           1446
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                                                61
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                                                                                                                                                                                  Similarity
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                                              CTTTTAAGGAAGTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTAGCAAA
                                                                                                                                ACAAGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAAACGCAAACT
                                                                     CTTTTAAGGAAGTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTAGCAAA
                                                                                                         ACAAGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to AAK64702 encode the human immune/haematopoietic antigen
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2000US-0251868P.

2000US-0251869P.

2000US-0251989P.

2000US-0251990P.

2000US-0251990P.
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2000US-0249215P.
2000US-0249215P.
2000US-0249217P.
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2000US-0249269P.
2000US-0250391P.
2000US-0251030P.
2000US-0251030P.
2000US-0251030P.
2000US-0256719P.
                                                                                                                                                                    Conservative
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Pred. No. 2.2e-65;
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                                                                                                                                                                                                                             97 G; 109
                                                                                                                                                                    Mismatches
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2000US-0236802P. 2000US-0237037P.

2000US-0233065P.
2000US-0234273P.
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2000US-023499P.
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2000US-0236369P.
2000US-0236369P.

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2000US-0237049P.
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2000US-0239935P.
2000US-024960P.
2000US-0241221P.

25-SEP-2000;
25-SEP-2000;
26-SEP-2000;
27-SEP-2000;
29-SEP-2000;
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29-SEP-2000;
20-OCT-2000;
20-OC

2000US-0241786P.
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2000US-0246477P.
2000US-0246478P.

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2000US-0246523P. 2000US-0246524P. 2000US-0246525P.

Db 12:  Qy 156:  Db 18:  Qy 162:  Qy 168:  Qy 168:  Qy 174:  Qy 174:  Db 30:  Qy 174:  Db 30:  Qy 174:  Db 36:  Db 37:  Db 3
15 16 16 16 16 17 17 18 18 18 18 18 18 19 18 19 19 19 19 19 19 19 19 19 19 19 19 19
121 CANTIGGANGGANAGTICCTIGANIGTIGGGGGANAGTATATTGGCTCTCOTGGGTC 180  1566 CCTTCATCCCANAGTCCANTCAGGTCANGTTGCTACATTTGGTATGGTGTGTGCTC 180  161 CTTCATCCCANAGTACATTATTATTGGTATGGTATGGTAT
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14-AUG-2000 22-AUG-2000 22-AUG-2000 22-AUG-2000 23-AUG-2000 01-SEP-2000 01-SEP-2000 01-SEP-2000 05-SEP-2000 06-SEP-2000 06-SEP-2000 06-SEP-2000 06-SEP-2000 06-SEP-2000 07-SEP-2000 08-SEP-2000 09-SEP-2000 09-SEP
2000US-0225759P 2000US-0226681P 2000US-0226868P 2000US-0226868P 2000US-0227182P 2000US-0229344P 2000US-0229344P 2000US-0229344P 2000US-0229344P 2000US-022931443P 2000US-0229314134P 2000US-02312444P 2000US-02312444P 2000US-023141144P 2000US-023141144P 2000US-023141144P 2000US-023141144P 2000US-023141144P 2000US-02314144P 2000US-023141144P 2000US-023141144P 2000US-023141144P 2000US-02314144P 2000US-02314144P 2000US-02314144P 2000US-02314144P 2000US-02314144P 2000US-02314144P 2000US-0231468P 2000US-023468P 2000US-024467P 2000US-024467P 2000US-024467P 2000US-024468P 2000US-024468528P 2000US-02446528P 2000US-02466528P

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Query Match
Best Local S
Matches 397
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17-NOV-2000
17-NOV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The present invention provides the protein and coding sequences of a number of human reproductive system related antigens. These can be used in the prevention and treatment of reproductive system disorders, including cancer. The present sequence is a genomic sequence encoding a protein of the invention
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Disclosure;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Isolated nucleic acid molecule encoding a reproductive system antigen used in preventing, treating or ameliorating a medical condition.
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     1688
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397; Conserv
                                                                                                                                                                                                            CTGAGGCAGGAGGATCACTTGAGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCGAA
                                                                                                                                                                                                                                                                                                               AAACTTAATAAGCTGGCTGGGCTCTGTGGCTCATGCCTGATCCCAGCACTTTGGGAGG
                                TCACGCCTGTAATCCCAGCACTTTGGGAGGCCGAGCCGGGCGGATCACCTGTGGTCAGGA
                                                                                                                                                ATCCTGTCTCAAAAAAAAAAAAAAAAAAAAAAAGAAGA-GAGAGGGCCGGGCGTGGTGGC
                                                                                                                                                                                                                                                 TTGAGGAGGGAGGATGGCTTGAACACAGGTGTTCAAGGCCAGCCTGGGCAACATAACAAG
                                                                                                                                                                                                                                                                                                                                                               ANACAGAATGATAAAGCTGCGAACCGTGGCACACGCTCATAGTTCTAGCTGCTTGGGAGG
     TCATGCCTGTAATCCCCAGCACTTTGGGAGGCCGAGGTGGGCGGATCACCTGAGGTCAGGA
                                                                                                      accccatetetactaaaaatacaaaagttagecaggcatggecegggcatggtgggtgge
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nilarity 74.6%;
Conservative
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2000US-0249243P
2000US-0249249P
2000US-0249259
2000US-0249263P
2000US-0249299P
2000US-0249299P
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2000US-0251939P
2000US-0251398P
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2000US-0249207P.
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Pred. No. 5.9e-42;
0; Mismatches 133;
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RESULT 15
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17-MAR-2000;
11-MAR-2000;
11-MAR-2000;
07-JUN-2000;
07-JUL-2000;
07-JUL-2000;
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14-JUL-2000;
14-AUG-2000;
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US-09-736-936B-8
US-09-9813-917-3
US-09-608-285A-8
US-09-350-836B-8
US-09-370-265-8
US-09-370-265-8
US-09-370-625A-8
US-09-557-800C-4
US-09-557-800C-4
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US-09-758-5058A-5
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ALIGNMENTS

## ; TYPE: DNA ; ORGANISM: Human US-09-817-180-3 SOFTWARE: FASTSE SEQ ID NO 3 US-09-817-180-3 Sequence 3, Application US/09817180 Patent No. 6340584 GENERAL INFORMATION: APPLICANT: GAN, Weiniu et al. TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND I TITLE OF INVENTION: THEREOF FILE REFERENCE: CL001183 CURRENT APPLICATION NUMBER: US/09/817,180 CURRENT FILING DATE: 2001-03-27 NUMBER OF SEQ ID NOS: 4 FastSEQ for Windows Version 4.0 9.9%; ilarity 74.9%; Conservative Score 280; DB 4; L Pred. No. 3e-52; 0; Mismatches 110; DB 4; Length 15297;

ACTCCCTTAATGCCAACCTTCCCACCAGGCAGAATAAGAATAACCTGGCCAGTTGCTCAC

11770

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Indels 14;

Gaps

1700

11710

ACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGTGGAGGTTGCAGTAAGCT

2060

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ATCTCTACTAAAAATACAAAAATTAGCCAGGCATGGTGGCACGTGCCTGTAATCCCAGCT GCAGGTGGATCACCTGTGGTCAGGAGTTTGAGACCAGGCCAGACCATGGTGAAAACCCC CCGGGCGGATCACCTGTGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAAAACCCC AAGAGAGAGGGCCGGGCCTGGTGGCTCACGCCTGTAATCCCAGCACTTTTGGGAGGCCGAG AAGATCAGCTTGGACAACACAGTGAAACTCCATCTGTACAAAAATACAAAAATA-----GCCTGTCATCCCAGCACTTTGGGAGGCTGAGCTGGGTGGATCACTTGAGCCCAGGAGTTC GCTCATAGTTCTAGCTGCTTGGGAGGTTGAGGAGGAGGATGGCTTGAACACAGGTGTTC

-----GACTGGGCACGGTGGCTCACACCTGTAATCCCAGCACTTTGGGAGGCCGAG

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Sequence 3, Application US/10003295

Patent No. 6686187

Patent No. 6686187

GENERAL INFORMATION:
APPLICANT: GAN, Weiniu et al.

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF

FILE REFERENCE: CL001183DIV

CURRENT FILING DATE: 2001-12-06

NUMBER OF SEO ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENGTH: 15297

TYPE: DNA
ORGANISM: Homo sapiens
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CURRENT APPLICATION NUMBER: US/09/078,294
CURRENT FILING DATE: 1998-05-13
NUMBER OF SEQ ID NOS: 29
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 7
LENGTH: 11811
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Patent No. 6265211
GENERAL INFORMATION:
APPLICANT: Choo, Kong-Hong Andy
APPLICANT: Du Sart, Desiree
APPLICANT: Cancilla, Michael R.
TITLE OF INVENTION: A NOVEL NUCLEIC ACID MOLECULE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 350;
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Best Local Similarity 79.7%;
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                                                              GCAGTGAGCCAAGATCATGCCATTGCACTCCAGCCTGGGCAACAAGAGCAAAACTCTCAA 6249
                                                                                                                            AATCCCAGCTACTCAGGAGGCTGAGGCAGGAAAATCACTTGAACCCAGGAAGAGGAGGTT
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Pred. No. 5.2e-51;
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US-09-735-934A-3/c

Sequence 3, Application US/09735934A

Sequence 3, Application US/09735934A

Patent No. 6372468

GENERAL INFORMATION:
APPLICANT: LI, Jiayin et al
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS,
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CL000851

CURRENT APPLICATION NUMBER: US/09/735,934A

CURRENT FILING DATE: 2000-12-14

NUMBER OF SEQ ID NOS: 4

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENGTH: 43950

TYPE: DNA

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RESULT 5
US-10-060-332-3/c
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APPLICANT: LI, Jiayin et al

TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC

TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES

TITLE OF INVENTION: THEREOF

FILE REFERENCE: CLOOMS:1DIV

CURRENT APPLICATION UNDEER: US/10/060,332

CURRENT APPLICATION UNDEER: US/10/060,332

CURRENT FILING DATE: 2002-02-01

NUMBER OF SEQ ID NOS: 4

SOCTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 3

LENGTH: 43950

TUDE: NA 3950
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Best Local Similarity 77...
739; Conservative
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Patent No. 6528294
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Best Local Similarity 77.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCACTTTGGGAGGCCGAGGCAGGTGGATTACCTGAGGTTGGGAGTTCAAGACCAGCCT 17522
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      AAAAAAAAAAAAAGA----AAGAGAGAGGGCCGGGCGTGGTGGCTCACGCCTGTAATCC
                                                                TTGAGCGCAGAAGTTCAAGACCACCCTGGGCAACATAGCAAGACCCCCTATCTTAAAAAA
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                                                                                                                                                                                                                                                                                                   Score 269.8; DB 4;
Pred. No. 8.1e-50;
0; Mismatches 92;
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Pred. No. 8.1e-50;
0; Mismatches 92;
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                                                                                                                                                                                                                                                                                                      Indels
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APPLICANT: Donna T. Ward

APPLICANT: Andrew T. Watt

ITILE OF INVENTION: ANTISENSE MODULATION OF RECQL2 EXPRESSION

FILE REFERENCE: RTS-0207

CURRENT APPLICATION NUMBER: US/09/798,096

CURRENT FILING DATE: 2001-03-01

NUMBER OF SEQ ID NOS: 89

SEQ ID NO 10

LENGTH: 99500

TYPE: DNA

ORGANISM: Homo sapiens
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US-09-798-096-10/c
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                 43698 TTTTTTTTTTTTTTTAAAGTGGGGCTGGGCACGGTGGCTCACGCCTGTAATCCCAACA
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CCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGTGG
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                                                                                           ATGTGGTGAAACCCCGTCTTTACTAATAATAATAAAAATTAGCCGGGCATGGTGGTGCGTG 4351
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                                                                                                                                               ACATGGCAAAACCCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGCGTGGTAGCAGGCA 1985
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Pred. No. 1.5e-49;
0; Mismatches 103;
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; SEQ ID NO 3
; LENGTH: 59065
; TYPE: DNA
; ORGANISM: Human
US-09-813-817-3
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US-09-8
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CL001178
CURRENT APPLICATION NUMBER: US/09/813,817
CURRENT FILING DATE: 2001-03-22
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                        GAAACTCTGTCTCAAAAAGAAAAAAAAAA
                                                                                                 AAGACTCTGTCTCAGAAAAAAAAAAAAAAA 2128
                                                                                                                                                                                                                                                                                                                                                                              CCAGCACTTTGGGAGGCCGAGCCGGGCGGATCACCTGTGGTCAGGAGTTTGAGACCAGCC
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                                                                                                                                                                                                                                                                             TGACCAACATGGAGAAACCCTGTCTCTACTAAAAATACAAAATTAGCCAGGCGTGGTGG
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78.2%;
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Pred. No. 3.1e-49;
0; Mismatches 86
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APPLICANT: Ford, John
APPLICANT: Mulero, Julio
APPLICANT: Wulero, Julio
APPLICANT: Wuley, George
TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO
TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO
TITLE OF INVENTION: MOTOR OF JULIO TO
FILE REFERENCE: 28110/36570
CURRENT APPLICATION NUMBER: US/09/608,285A
CURRENT FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: 09/583,231
PRIOR FILING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 09/557,800
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US-09-978-197-3/c

Sequence 3, Application Patent No. 6403353 GENERAL INFORMATION:

US/09978197

PRIOR PRIOR PRIOR

FILING DATE: 2000-APPLICATION NUMBER: FILING DATE: 2000-

2000-04-25 2000-01-11

09/481,238

GENERAL INFORMATION: Sequence 8, Application Patent No. 6335013

US/09608285A

TO CD39-LIKE

RESULT 8

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; TYPE: DNA
; ORGANISM: Human
US-09-978-197-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: YAN, Chunhua et al.
TITLE OF INVENTION: ISOLATED HUMAN KINASE PROTEINS, NUCLEIC
TITLE OF INVENTION: ACID MOLECULES ENCODING HUMAN KINASE PROTEINS, AND USES
TITLE OF INVENTION: THEREOF
FILE REFERENCE: CL001178DIV
CURRENT FILING DATE: 2001-10-17
CURRENT FILING DATE: 2001-10-17
PRIOR APPLICATION NUMBER: 09/813,817
PRIOR APPLICATION NUMBER: 09/813,817
PRIOR FILING DATE: 2001-03-22
NUMBER OF SEQ ID NOS: 4
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 59065
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                                      AAGACTCTGTCTCAGAAAAAAAAAAAAAAA 2128
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                                                                               AGGCAGAGGTTGCGGTGAGCTGAGTTCGTGCCATTGCATTCCAGCCTGGGCAACAAGAGT
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Pred. No. 3.1e
0; Mismatches
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PRIOR PRIOR

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RESULT 10
US-09-350-836B-8/c
; Sequence 8, Application US/09350836B
; Patent No. 6387645
; GENERAL INFORMATION:
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LENGTH: 9365
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Best Local Similarity
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COTHER INFORMATION: n = a/
NAME/KEY: misc_feature
'^^aTION: (9303)
' n =
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SOFTWARE: PatentIn Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER:
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OTHER INDEXMATION: n = adenine
NAME/KEY: misc feature
LOCATION: (9311)
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LOCATION: (9214)
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OTHER INFORMATION: n = adenine
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LOCATION: (3409)
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OR FILING DATE: 1999-08-09
OR APPLICATION NUMBER: 05/20
OR FILING DATE: 1999-07-16
OR FILING DATE: 1999-07-09
OR APPLICATION NUMBER: 09/27
OR FILING DATE: 1999-03-19
OR APPLICATION NUMBER: 09/27
OR FILING DATE: 1999-03-19
OR APPLICATION NUMBER: 09/24
OR FILING DATE: 1999-03-03
OR FILING DATE: 1999-02-04
OR FILING DATE: 1999-02-04
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S: 60
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79.0%; Pred. No. 3.8e-49;
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LOCATION: (9303)
COTHER INFORMATION: n= adenine or guanine or NAME/KEY: misc feature
LOCATION: (9311)
OTHER INFORMATION: n= adenine or guanine or US-09-350-836B-8
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CURRENT FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: 09/273,447
PRIOR FILING DATE: 1999-03-19
PRIOR APPLICATION NUMBER: 09/118,205
PRIOR FILING DATE: 1998-07-16
PRIOR APPLICATION NUMBER: 09/122,449
PRIOR PRIOR FILING DATE: 1998-07-24
PRIOR PILING DATE: 1998-07-24
PRIOR PILING DATE: 1998-07-24
PRIOR PILING DATE: 1998-02-04
NUMBER OF SEQ ID NOS: 23
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SEQ ID NO 8
LENGTH: 9365
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Best Local Similarity
Matches 297; Conserv
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APPLICANT: Mulero, John
TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO NOVEL CD39-LIKE
TITLE OF INVENTION: POLYBEDTIDES
FILE REFERENCE: 28110/35761
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LOCATION:
NAME/KEY:
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LOCATION:
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OTHER INFORMATION: n= adenine
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(2863)..(2942)
                                                         CCGAGCCGGGCGGATCACCTGTGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAA
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79.0%; Pred. No. 3.8e-49;
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CURRENT FILING DATE: 1999-08-09
EARLIER APPLICATION NUMBER: PCT/US99/16180
EARLIER FILING DATE: 1999-07-16
EARLIER FILING DATE: 1999-07-09
EARLIER APPLICATION NUMBER: 09/23,447
EARLIER FILING DATE: 1999-03-19
EARLIER FILING DATE: 1999-03-19
EARLIER APPLICATION NUMBER: 09/244,444
EARLIER APPLICATION NUMBER: 09/244,444
EARLIER APPLICATION NUMBER: 09/12,449
EARLIER APPLICATION NUMBER: 09/12,449
EARLIER FILING DATE: 1998-07-24
EARLIER FILING DATE: 1998-07-24
EARLIER FILING DATE: 1998-07-24
EARLIER APPLICATION NUMBER: 09/12,449
EARLIER APPLICATION NUMBER: 09/12,449
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APPLICANT: Rord, John
APPLICANT: Mulero, Julio
TITLE OF INVENTION: METHODS AND MATERIALS RELATING
TITLE OF INVENTION: POLYPEPTIDES
FILE REFERENCE: 28.11/35598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: I
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NUMBER OF SEQ ID NOS: 37
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LOCATION: (72)..(287)
                                                                    NAME/KEY:
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ORGANISM: Homo
   FEATURE:
NAME/KEY: CDS
LOCATION: (6965)..(7138)
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LOCATION: (2466)..(2555)
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LOCATION: (1280)..(1579)
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(2863)..(2940)
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APPLICANT: Mulero, Julio
APPLICANT: Mulero, Julio
APPLICANT: Yeung, George
FITLE OF INVENTION: Methods and Materials Relating to CD39-Like
FILE OF INVENTION: Polypeptides
FILE REFERENCE: 2010/36457
CURRENT APPLICATION NUMBER: US/09/557,800C
CURRENT FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/481,238
PRIOR APPLICATION NUMBER: 09/370,265
PRIOR FILING DATE: 1999-08-09
PRIOR FILING DATE: 1999-08-09
PRIOR APPLICATION NUMBER: PCT/US99/16180
PRIOR FILING DATE: 1999-07-16
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LOCATION: (9311)
OTHER INFORMATION: n = adenine or guanine or cytosine or thymine
3-09-370-265-8
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OTHER INFORMATION: n = adenine
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9.4%; Score 265.6; DB 4
Local Similarity 79.0%; Pred. No. 3.8e-49;
hes 297; Conservative 34; Mismatches 34
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PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: 09/273447
PRIOR APPLICATION NUMBER: 09/273447
PRIOR APPLICATION NUMBER: 09/122449
PRIOR APPLICATION NUMBER: 09/244444
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Best Local Similarity
Matches 297; Conserv
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PRIOR APPLICATION NUMBER: 09/118,205
PRIOR FILING DATE: 1998-07-16
NUMBER OF SEQ ID NOS: 56
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LOCATION: (9311)
OTHER INFORMATION: n = adenine or guanine
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OTHER INFORMATION: n =
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LOCATION: (9214)
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LOCATION: (3409)
OTHER INFORMATION: n =
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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
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AAAAAATAATAATAAA
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RESULT 13 US-09-370-625A-8/c

Sequence 8, Application US/09370625A Patent No. 6600032 GENERAL INFORMATION: APPLICANT: Ford, John

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US-09-370-625A-8
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  Best Local Sin
Matches 297;
                          Query Match
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TITLE OF INVENTION: METHODS AND MATERIALS RELATING TO NOVEL CD39-LIKE POLYPEPTIDES
FILE REFERENCE: 28110/35908
CURRENT APPLICATION NUMBER: US/09/370,625A
CURRENT FILING DATE: 1999-08-09
PRIOR APPLICATION NUMBER: PCT/US99/16180
PRIOR FILING DATE: 1999-07-16
PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: 09/350,836
PRIOR FILING DATE: 1999-07-09
PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: 09/273,447
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TYPE: DNA
ORGANISM: Homo s
FEATURE:
NAME/KEY: exon
LOCATION: (1)...
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NUMBER OF SEQ ID NOS: 39
                                                                NAME/KEY: misc_feature
LOCATION: (9311)
OTHER INFORMATION: n =
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LOCATION:
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LOCATION:
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OTHER INFORMATION: n =
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LOCATION: (3409)
OTHER INFORMATION: n =
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LOCATION: (9303)
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LOCATION: (9214)
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(2467)..(2555)
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(1820)..(1855)
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Pred. Mismatches 34;
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                                                                         ; FEATURE: misc feature
LOCATION: (13641)
; OTHER INFORMATION: n =
US-09-608-285A-42
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CURRENT FILING DATE: 2000-06-30
PRIOR APPLICATION NUMBER: 09/583,231
PRIOR FILLING DATE: 2000-05-26
PRIOR APPLICATION NUMBER: 09/557,800
PRIOR FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/481,238
PRIOR APPLICATION NUMBER: 09/481,238
PRIOR FILING DATE: 2000-01-11
                                                                                                                                                                                                                          SOFTWARE: 1
SEQ ID NO 42
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Query Match
Best Local Similarity 79.0
Matches 297; Conservative
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                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
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                                                                                                                                                                LENGTH: 14747
TYPE: DNA
ORGANISM: Homo sapiens
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Yeung, George
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9.4%; Score 265.6; DB 4; 79.0%; Pred. No. 4.5e-49; tive 34; Mismatches 34;
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APPLICANT: Ford, John
APPLICANT: Mulero, Julio
APPLICANT: Weung, George
TITLE OF INVENTION: Methods and Materials Relating to CD39-Like
TITLE OF INVENTION: Polypeptides
FILE REFERENCE: 28110/36457
FURRENT APPLICATION NUMBER: US/09/557,800C
CURRENT FILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: 09/481,238
PRIOR FILING DATE: 2000-01-11
FRIOR APPLICATION NUMBER: 09/370,265
PRIOR APPLICATION NUMBER: PCT/US99/16180
PRIOR APPLICATION NUMBER: PCT/US99/16180
PRIOR APPLICATION NUMBER: 09/350836
PRIOR FILING DATE: 1999-07-16
PRIOR APPLICATION NUMBER: 09/350836
PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: 09/373447
; FEATURE:

NAME/KEY: misc feature

; LOCATION: (13641)

; OTHER INFORMATION: n = adenosine or

US-09-557-800C-42
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US-09-557-800C-42/c
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                                                                                                                                                                                     SOFTWARE: PatentIn
SEQ ID NO 42
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                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/244444
PRIOR FILING DATE: 1999-02-04
PRIOR APPLICATION NUMBER: 09/118,205
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PRIOR APPLICATION NUMBER: 09/122449
PRIOR FILING DATE: 1998-07-24
                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 56
                                                                                                                                                                                                                                                               PRIOR FILING DATE:
                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
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Query Match Best Local Similarity

Score Pred.

265.6; DB 4; No. 4.5e-49;

B 8	유 성	B 8	d VQ	유 성	유 성	P &	Ma
2114 10802	2054 10862	1994 10922	1936 10982	1876 11042	1824 11102	1765 11162	Matches 29
2114 GAAAAAAAAAAAA 2129             0802 AAAAAATAATAATAAA 10787	2054 GTRAGCTGAGATCGTGCCGTTGCACTCCAGCCTGGGCGACAAGAGCCAAGACTCTGTCTCA 2113	1994 CCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGTGGAGGTTGCA	1936 ACCCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGGGTGGTAGCAGGCACCTGTAAT 1993	1876 CCGAGCCGGGCGGATCACCTGTGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAA 1935	1824AGAGAGGGCCGGGCGTGGTGGTGCTCACGCCTGTAATCCCAGCACTTTGGGAGG	1765 CCAGCCTGGGCAACATAACAAGATCCTGTCTCTCAAAAAAAA	297; Conservative 34; Mismatches 34; Indels 11; Gaps
	1 2113 1 10803	10863	r 1993 r 10923	1935	3 1875 3 11043	1823	2;

Search completed: March 7, 2004, 11:59:47 Job time: 222 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

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Minimum DB seq length: 0
Maximum DB seq length: 200000000
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Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Published Applications NA:*
// cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Query Match Length DB	BIC	ID	Description
ъ	2818	100.0	2818	و و	US-09-966-880A-7	Sequence 7, Appli
2	2174.6	77.2	6564	9	US-09-966-880A-10	10
ω	2174.6	77.2	11204	ø	US-09-966-880A-35	
4	2172	77.1	2172	ω	US-09-966-880A-15	Sequence 15, App.
ហ	603.4	21.4	2440	Q	US-09-966-880A-1	Sequence 1, Appl:
თ	295.2	10.5	13862	10	US-09-764-891-5477	e 5477,
7	295.2	10.5	13862	10	US-09-764-891-10204	Sequence 10204, A
00	295.2	10.5	13862	14	US-10-205-428-1003	1003,
9	292.6	10.4	7809	10	US-09-764-891-6094	
10	284.4	10.1	32249	10	US-09-764-891-7364	7364,
11	281.4	10.0	80959	ø	US-09-962-436-292	Sequence 292, App
12		10.0	65608	9	US-09-962-832-119	Sequence 119, Apr
13	281.4	10.0	65608	ø	US-09-954-531-180	
14	280.2	9.9	11821	o	US-09-764-877-2857	2857,
15	280.2	9.9	11821		US-10-242-515-2857	

Query Match Best Local Similarity

100.0%;

Score 2818; Pred. No. 0;

DB 9;

Length 2818;

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Sequence 3, Appli	Sequence 3, Appli	w	N	μ	Sequence 66, Appl	æ	Sequence 13, Appl	Sequence 1995, Ap	Sequence 3, Appli	Sequence 3, Appli	Sequence 102635,	Sequence 969, App	14,	Sequence 2903, Ap	Sequence 2903, Ap	-	27	7,	Sequence 2856, Ap	285	Sequence 5, Appli	<u>ص</u>	e 22	227	e 11	12	3	e 853	Sequence 3, Appli

## ALIGNMENTS

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NESULT 1

US-09-966-880A-7

; Sequence 7, Application US/09966880A

PRICENT NO. US20020164743A1

GENERAL INFORMATION:

APPLICANT: HONJO, TASUKU
APPLICANT: NUMBER: US/09/966,880A

CURRENT FILING DATE: 2001-09-28

PRIOR APPLICATION NUMBER: US/09/966,880A

CURRENT FILING DATE: 1999-12-27

PRIOR APPLICATION NUMBER: UP 11-371382

PRIOR APPLICATION NUMBER: UP 11-178999

PRIOR APPLICATION NUMBER: UP 11-87192

PRIOR APPLICATION NUMBER: UP 1
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901 GCAACATTGTCCCCTACTGGGAATAACAGAACTGCAGGACCTGGGAGCATCCTAAAGTGT 960		TACTITIGGACTITGATAGCAACTICCAGGAATGTCACACGACGACGAATATCTCTCTGTT    TACTITIGGACTITGATAGCAACTICCAGGAATGTCACACGACGAAGAATATCTCTCTGTGT   TACTITIGGACTITGATAGCAACTICCAGGAATGTCACACACGATGAAATAATCTCTCTCTGTT   AAGACAGTIGGATAAAAACAGTCTTCAAGTCTTCTCTGTTTTTTTTTT	⊅> O	481 GCAAATAGCCATCATGACCTTCAAAGATTATTTTTACTGCTGGAATACTTTTGTAGAAAA 540	361 GGCCGACTTTCTGCGAGGGAACCCCAACCTCAGTCTGAGGATCTTCACCGCGCCGCCTCTA 420 421 CTTCTGTGAGGACCGCAAGGCTGAGCCCGAGGGGCTGCGCGCGC	CTGCTACCGCGTCACCTGGTTCACCTCGGAGCCCCTGCTACGACTGTGCCCGA	181 GAGGGGTGACAGTGCTACATCCTTTTCACTGGACTTTTGGTTATCTTCGCAATAAGAACGG 240	61 AGACACTCTGGACACCACTAIGGACAGCCTCTTGAIGAACCGGAGGAAGTITCTTTACCA 120	Matches 2818; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  1 AGAGAACCATCATTAATTGAAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGCAAGA 60
20 V O O O O O O O O O O O O O O O O O O	Q B Q B	Q	Q B Q B	Q B &	2 P Q B	Qy Qy	Db 07	S B S B 1	5 B 8
AGGCACCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGA GGTGGAGGTTGCAGTAAGCTGAGATCGTGCCGTTGCACTCCAGCCTGGGCGACAAGAGCC	1861 CAGCACTTTGGGAGGCCGAGCCGGGGGATCACTGTGGTCAGGAGTTTGAGACCAGCCT 1920  1921 GGCCAACATGGCAAAACCCCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGGGTGGTAGC 1980  1921 GGCCAACATGGCAAAACCCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGCGTGGTAGC 1980  1921 GGCCAACATGGCAAAACCCCGTCTGTACTCAAAATGCAAAAATTAGCCAGGCGTGGTAGC 1980  1981 AGGCACCTGTAATCCCAGCTACTTGGGAGGCTGAGGCAGGAATCGCTTGAAACCCCAGGA 2040		1621 GATGCTTCTCCCAAAGGTATATTAACTATAAGAGAGTTGTGACAAAACAGAATGATAA 1680  1681 AGCTGCGAACCGTGGCACACGCTCATAGTTCTAGCTGCTTGGGAGGTTGAGGAGGGAG	GOSTICITICALITACIONALISCAMI ISCAMI INCOMENTATO IN CONTROLLI IN CONTROL	AAACTCTTTTAAGGAAGTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTA GCAAACAATTGGAAGGAAGTTGCTTGAATGTTGGGAAGAGAAAATCTATTGGCTCTCGT	TGTGAACAAGACACCCTAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGC  [	CAGAAGCATGTTTTATGTTTGTACAAAAGAAGATTGTTATGGTGGGAAGGAA	AAACTCTTCCATCAGGCCATGATCTATAGGACCTCCTAATGAGAGTATCTGGGTGATTGT GACCCCAAACCATCTCCCAAAGCATTAATATCCAATCATGAGGAGTATCTGTTTTAATCAG	1081 AGTGGTGTTAGTGATAGATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACAC 1140

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Gaps

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APPLICANT: MUZEMATESI, MASAMICHI
TITLE OF INVENTION: NOVEL CYTIDINE DEAMINASE
FILE REPERENCE: 06501-088001
CURRENT APPLICATION NUMBER: US/99/966,880A
CURRENT FILING DATE: 2001-09-28
PRIOR APPLICATION NUMBER: PCT/JF00/01918
PRIOR FILING DATE: 2000-03-28
PRIOR FILING DATE: 1900-03-28
PRIOR FILING DATE: 1999-12-27
PRIOR FILING DATE: 1999-12-27
PRIOR APPLICATION NUMBER: JP 11-178999
PRIOR APPLICATION NUMBER: JP 11-178999
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PRIOR APPLICATION NUMBER: JP 11-17899
PRIOR APPLICATION NUMBER: JP 11-17899
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR APPLICATION DATE: 1999-03-29
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US-09-966-880A-10
                                                                              NUMBER OF SEQ ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 10
LENGTH: 6564
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 10, Application U Patent No. US20020164743A1 GENERAL INFORMATION:
         Query Match
                                             ORGANISM: Homo
-09-966-880A-10
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Honjo, APPLICANT: Murama
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       Score
       2174.6;
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       6564;
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APPLICANT: Honjo, Tasuku

APPLICANT: Muramatsu, Masamichi

TITLE OF INVENTION: NOVEL CYTIDINE DEAMINASE

FILE REFERENCE: 06501-088001

CURRENT APPLICATION NUMBER: US/09/966,880A

CURRENT FILING DATE: 2001-09-28

PRIOR APPLICATION NUMBER: PCT/JP00/01918

PRIOR APPLICATION NUMBER: PCT/JP00/01918

PRIOR FILING DATE: 1999-12-27

PRIOR FILING DATE: 1999-12-27

PRIOR APPLICATION NUMBER: JP 11-371382

PRIOR APPLICATION NUMBER: JP 11-178999

PRIOR APPLICATION NUMBER: JP 11-178999

PRIOR APPLICATION NUMBER: JP 11-87192

PRIOR APPLICATION NUMBER:
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; TYPE: DNA
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Best Local Similarity
Matches 2177; Conserv
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TATGATGGAATAAACTTGAGA
                                                  GATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGG
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                       GATTTTTCTATTCTTTTCCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGG
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	2236 10569	2177 AAGCATTGCAAGGAAATTGTGCTTTATCCAACAAAATGTAAGGAGCCAATAAGGGATCCC	
C - : -	2176 10509	2117 AAAAAAAAAAAAAGAGAGAGAGAGAGAAAGAGAACAATATTTGGGAGAGAAGGATGGGG	н
	2116 10449	2057 AGCTGAGATCGTGCCGTTGCACTCCAGCCTGGGCGACAAGAGCCAAGACTCTGTCTCAGAA	н .
,	2056 10389	1997 AGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCAGGAGGTGGAGGTTGCAGTA	
	1996	1937 CCCCGTCTGTACTCAAAATGCAAAATTAGCCAGGGGTGGTAGCAGGCACCTGTAATCCC	
	1936	1877 CGAGCOGGGCGGATCACCTGTGGTCAGGAGTTTGAGACCAGCCTGGCCAACATGGCAAAA	
	1876 10209	1817 AAGAAAGAGAGAGGGCCGGGCGTGGTGGCTCACGCCTGTAATCCCAGCACTTTGGGAGGC	ب
· · C ×	1816 10149	1757 GTTCAAGGCCAGCCTGGGCAACATAACAAGATCCTGTCTCTCAAAAAAAA	
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2 2 5	1696 10029	1637 GTATATTAACTATATAAGAGAGTTGTGACAAAACAGAATGATAAAGCTGCGAACCGTGGC	
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9 B 6	1576 9909	1517 AAGTIGCITGAAIGTIGGGGAGAGGAAAAICTAITGGCICTCGIGGGICTCTICAICTCA	
) E 5	1516 9849	1457 GTCCCTAATTTAGAAACACCCACAAACTTCACATATCATAATTAGCAAACAATTGGAAGG	
S B 8	1456 9789	1397 TAATAATGGGTTGATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAA	
5 5 8	1396 9729	1337 CTTCAAGCTACTTTAATAAAGGATCTTAAAATGGGCAGGAGGACTGTGAACAAGACACCC	
)	1336 9669	1277 TGTTTGTACAAAAGAATTGTTATGGGTGGGGATGGAGGTATAGACCATGCATG	
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                 TATGATGGAATAAACTTGAAA 2797
                                                                           ATAAAATACCAAATAAAATAATATAAAAAGTGATTTATATGAAGTTAAAAATAAAAATCAG
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US-09-966-880A-15
Sequence 15, Application US/09966880A
Patent No. US20020164743A1
GENERAL INFORMATION:
APPLICANT: HONJO, TASUKU
APPLICANT: HONJO, TASUKU
APPLICANT: MULEMENTION: NOVEL CYTIDINE DEAMINASE
FILE REFERENCE: 06501-088001
CURRENT APPLICATION NUMBER: US/09/966,880A
CURRENT FILING DATE: 2001-09-28
PRIOR APPLICATION NUMBER: PCT/JP00/01918
PRIOR FILING DATE: 1909-12-27
PRIOR FILING DATE: 1999-12-27
PRIOR APPLICATION NUMBER: JP 11-371382
PRIOR APPLICATION NUMBER: JP 11-77899
PRIOR APPLICATION NUMBER: JP 11-178999
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR FILING DATE: 1999-03-29
NUMBER OF SEQ ID NOS: 36
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 15
LENGTH: 2172
TYPE: DNA
, ORGANISM: Homo sapiens
US-09-966-880A-15
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Query Match 77.1%; Score 2172; DB 9; Length 2172;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 2172; Conservative 0; Mismatches 0; Indels 0; Gaps 0,

Matches 2172; Conservative 0; Mismatches 0; Indels 0; Gaps 0,

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PRIOR APPLICATION NUMBER: PCT/JP00/01918
PRIOR FILING DATE: 2000-03-28
PRIOR FILING DATE: 1999-12-27
PRIOR FILING DATE: 1999-12-27
PRIOR APPLICATION NUMBER: JP 11-371382
PRIOR APPLICATION NUMBER: JP 11-178999
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR APPLICATION NUMBER: JP 11-87192
PRIOR FILING DATE: 1999-03-29
NUMBER OF SEG ID NOS: 36
SOFTWARE: FASTSEQ for Windows Version 4.0
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Patent No. US20020164743A1
GENERAL INFORMATION:
APPLICANT: Honjo, Tasuku
APPLICANT: Muramatsu, Masamichi
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Best Local Similarity
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NAME/KEY: misc_feature
LOCATION: (1)...(2440)
OTHER INFORMATION: n = A,T,C
-09-966-880A-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Muramatsu, Masamichi
TITLE OF INVENTION: NOVEL CYTIDINE DEAMINASE
FILE REFERENCE: 06501-088001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
ORGANISM: Mus musculus
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LOCATION: (93)...
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Publication No. US20030077808A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodies
FILE REFERENCE: PC006
                                                                                                          Sequence 10204, Application US/09764891
publication No. US20030077808A1
GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and
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SEQ ID NO 5477
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Best Local Similarity
                                                 FILE REFERENCE: PC006
CURRENT APPLICATION NUMBER: US/09/764,891
CURRENT FILING DATE: 2001-01-17
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CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or NUMBER OF SEQ ID NOS: 10231 SOFTWARE: PatentIn Ver. 2.0
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; SEQ ID NO 10204
; LENGTH: 13862
; TYPE: DNA
; ORGANISM: Homo sapiens
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AGAAAAATTAGCCAGCGTGGTGGCATGCACCTGTAGTCCTAGCTACTTGGG
                              AGAGAACAATATTTGGGAGAGAAGGATGGGGAAGCATTGCAAGGAAATTGTG
                                                                                             CGTTTGAAGCCAGGAGGCGGAGTTTGCACCGAGCCGAGATTGTGCCACTGCACTCCAGCC
                                                                                                                                                                       CGCTTGAACCCAGGAGGTGGAGGTTGCAGTAAGCTGAGATCGTGCCGTTGCACTCCAGCC
                                                                                                                                                                                                            GCCAGGCTTTATGGTAGGCGCCTATAATCCCAGCTACTCGGAAGGCTGAGGCAGGAGAAT
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                                                                  Conservative
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Pred. No. 5.6e-52;
0; Mismatches 133;
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WS-10-205-428-1003
US-10-205-428-1003
; Sequence 1003, Application US/10205428
; Publication No. US20030108907A1
; GENERAL INFORMATION:
 APPLICANT: Rosen et al.
 TITLE OF INVENTION: Nucleic Acids, Proteins, and Antibodie.
 FILE REFERENCE: PA117C1
; CURRENT APPLICATION NUMBER: US/10/205,428
; CURRENT FILING DATE: 2002-07-26
; PRIOR APPLICATION NUMBER: 60/179,065
; PRIOR APPLICATION NUMBER: 60/179,065
; PRIOR FILING DATE: 2000-01-31
; PRIOR APPLICATION NUMBER: 60/180,628
; PRIOR FILING DATE: 2000-02-04
; PRIOR APPLICATION NUMBER: 60/214,886
; PRIOR APPLICATION NUMBER: 60/214,886
; PRIOR APPLICATION NUMBER: 60/217,487
; PRIOR APPLICATION NUMBER: 60/217,487
; PRIOR APPLICATION NUMBER: 60/225,758
; PRIOR APPLICATION NUMBER: 60/225,758
; PRIOR APPLICATION NUMBER: 60/220,963
; PRIOR APPLICATION NUMBER: 60/220,963
; PRIOR FILING DATE: 2000-08-14
; PRIOR APPLICATION NUMBER: 60/217,496
; PRIOR FILING DATE: 2000-07-16
; PRIOR APPLICATION NUMBER: 60/217,496
; PRIOR APPLICATION NUMBER: 60/217,496
; PRIOR FILING DATE: 2000-07-11

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APPLICANT: ROSEN et al.
APPLICANT: ROSEN et al.
TITLE OF INVENTION: Nucleic Acids, Proteins, and
FILE REFERENCE: PC006
CURRENT APPLICATION NUMBER: US/09/764,891
CURRENT FILING DATE: 2001-01-17
Prior application data removed - consult PALM or
NUMBER OF SZQ ID NOS: 10231
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 6094
LENGTH: 7809
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PRIOR FILING DATE: 2000-08-14

PRIOR APPLICATION NUMBER: 60/218,290

PRIOR FILING DATE: 2000-07-14

Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 1019

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 1003

LENGTH: 13862
                                                                                                                                                                                                                       Sequence 6094, Application US/09764891
Publication No. US20030077808A1
GENERAL INFORMATION:
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TYPE: DNA
ORGANISM: Homo sapiens
-09-764-891-6094
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Pred. No. 5.6e-52;
0; Mismatches 133;
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NUMBER OF SEQ ID NOS: 10231
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7364
                                                                                                                                                                                                                                                                                                                                                                         Sequence 7364, Application US/09764891 Publication No. US20030077808A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 385; Conserv
                                                                                                                     Matches 365;
                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                              APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PC006
CURRENT APPLICATION NUMBER: US/09/764,891
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                         LENGTH: 32249
TYPE: DNA
ORGANISM: Homo
                                                                                                                                   Local Similarity
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                    GGCTTGAACACAGGTGTTCAAGGCCAGCCTGGGCAACATAACAAGATCCTGTCTCTCAAA 1801
                                                          GCCTGGTACAGTGGCTCATGCCTGTAACCTCAGCACTTCGGGAGATCTAGGCGGTCAGAT 15099
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                                                                                                                  Score 284.4; DB 10;
pred. No. 1.8e-49;
0; Mismatches 116;
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Pred. No. 1.4e-51;
0; Mismatches 104;
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CURRENT APPLICATION NUMBER: US/09/962,436
CURRENT FILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: US/60/235,082
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/234,924
PRIOR FILING DATE: 2000-09-25
NUMBER OF SEQ ID NOS: 568
SOFTWARE: Patentin version 3.0
SEQ ID NO 292
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NAME/KEV: misc feature
; OTHER INFORMATION: n=a,t,g
US-09-962-436-292
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Patent No. US20020081301A1
GENERAL INFORMATION:
APPLICANT: Soppet, Daniel
TITLE OF INVENTION: Center Gene Determination and Therapeutic Screening
TITLE OF INVENTION: Sets
FILE REFERENCE: 689290-75
                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity Matches 376; Conserv
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Pred. No. 1.2e-48;
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CURRENT FILING DATE: 2001-09-25
PRIOR APPLICATION NUMBER: US/60/235,077
PRIOR FILING DATE: 2000-09-25
PRIOR APPLICATION NUMBER: US/60/235,280
PRIOR FILING DATE: 2000-09-25
NUMBER OF SEQ ID NOS: 259
SOFTWARE: Patentin version 3.0
SEQ ID NO 119
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US-09-962-832-119
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Best Local Similarity
Matches 376; Conserv
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TYPE: DNA
ORGANISM: Homo sapiens
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RESULT 13
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PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: US/60/234,009
PRIOR FILING DATE: 2000-09-20
PRIOR APPLICATION NUMBER: US/60/234,034
PRIOR FILING DATE: 2000-09-20
PRIOR FILING DATE: 2000-09-22
PRIOR APPLICATION NUMBER: US/60/234,509
PRIOR FILING DATE: 2000-09-22
PRIOR APPLICATION NUMBER: US/60/234,567
PRIOR FILING DATE: 2000-09-22
PRIOR FILING DATE: 2000-09-22
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Best Local Similarity
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Patent No. US20020165180A1
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TITLE OF INVENTION: Process for Identifying
TITLE OF INVENTION: Gene Sets
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CURRENT FILING DATE: 2002-05-02
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Pred. No. 1.2e-48;
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US-09-764-877-2857
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                                                        Sequence 2857, Appli
Publication No. US20
GENERAL INFORMATION:
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SEQ ID NO 2857
LENGTH: 11821
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APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic
FILE REFERENCE: PC005C1
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CURRENT FILING DATE: 2001-01-17
Prior application data removed - refer to
NUMBER OF SEQ ID NOS: 4031
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TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: PC005
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Pred. No. 8e-49;
0; Mismatches 118;
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CURRENT FILING DATE: 2002-09-13
PRIOR APPLICATION NUMBER: 09/764,877
PRIOR FILING DATE: 2001-01-17
PRIOR PRIOR PAPPLICATION NUMBER: 60/179,065
PRIOR PILING DATE: 2000-01-31
PRIOR APPLICATION NUMBER: 60/180,628
PRIOR APPLICATION NUMBER: 60/180,628
PRIOR APPLICATION NUMBER: 60/214,886
PRIOR FILING DATE: 2000-02-04
PRIOR APPLICATION NUMBER: 60/214,886
PRIOR APPLICATION NUMBER: 60/217,487
PRIOR APPLICATION NUMBER: 60/217,487
PRIOR FILING DATE: 2000-05-28
PRIOR APPLICATION NUMBER: 60/217,487
PRIOR FILING DATE: 2000-07-11
PRIOR FILING DATE: 2000-07-11
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NUMBER OF SEQ ID NOS: 4031
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2857
THEORYTH: 11821
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4659 GCTCATGCCGGTAATCCCAGCACTTTAGGA-ATTTAGGCAGGAGGATCACTTGAGGCCAG
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                                                                       AAAAAAAAAAAAAAAAGAGAGAGAGAGAAAAGAGAAAA 2153
                                                                                                                                                                                                                                TAAGCTGAGATCGTGCCGTTGCACTCCAGCCTGGGCGACAAGAGCAAGACTCTGTCTCAG 2114
                                                                                                                                                                                                                                                                                                                                                                                CCAGCTACTTGGGAGGCTGAGGCAGGAGAATCGCTTGAACCCCAGGAGGTGGAGGTTGCAG 2054
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                                                                                                                                                                                                                                                                                                                             CCAGCTACTTGGAAGGCTGAGGCAGGAGAATCACTTGAATCTGGGAGGTGGAGGTTGCAG
AATAAAATAAATAAATAAATAAATAAATAAATA 5102
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ilarity 74.4%;
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Search completed: March

7,

2004, 14:48:44

Job time : 971 secs

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1 (bases 1 to 1201)

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2 (bases 1 to 1201)

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2 (bases 2 to 1201)

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BF975106 60224457
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AL581446 AL581446
BG757392 602711022
AW75682 EST390691
BG398364 602439932
AW504807 UI-HF-BN0
BG758815 602713177
BG7550815 60271317511
BF238155 6027131751
BF238155 6027131751
BG75685 602723670
BG7758815 6023238671
CD707143 EST23670
BG170824 602453552
BG68876 602650861
BP664352 002146010
AW135547 UI-H-B13-AK08014 MNB muscu
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                                                                                                                                                                                             GACAGCTTCGGCGCATCCTTTTGCCCCTGTATGAGGTTGATGACTTACGAGACGCATTTC
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                                                  GAAGACAGTGGATAAAAAACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCA
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/cell type="B CELLS (RAMOS CELL LINE) COT 25-NORWALIZED"
/cell_line="RAMOS CELL LINE"
/clone_lib="Homo sapiens B CELLS (RAMOS CELL LINE) COT 25-NORWALIZED"
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Matches 930;
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1 (bases 1 to 1201)

Li,W.B., Gruber,C., Jessee,J. and Polayes,D.

Full-length CDNA libraries and normalization

Unpublished (2001)
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AL559877.2
                                                                                                                                                                                                                                                                                                                                                                                                                                             http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSODG003DA07QP1&cluster=6672.r. Contact
cgi-bin/cluster.cgi?seq=CSODG003DA07QP1&cluster=6672.r. Contact
Feng Liang Email : fliang@lifetech.com URL
Feng Liang Email : fliang@lifetech.com CRD
http://fulllength.invitrogen.com/ InvitroGen Corporation 1600
http://fulllength.invitrogen.com/ TN . CCORGONADA07DP1
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Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6672.r For
more information about this cluster, see
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genoscope - Centre National de Sequencage
BP 191 91006 EVRY cedex - France
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AL559877 Homo sapiens B CELLS (RAMOS CELL
clone CSODG003YB14 5-PRIME, mRNA sequence.
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                                                                        Similarity 90.
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                     AAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGCAAGAAGACACTCTGGACACCCACT
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 AAGCAGGCTGGTACCGGTCCGGAATTCCCCGGGATGGCAAGAAGACACTCTGGACACCACT
                                                                                                                                                                                                                                                                                                                                                                                                    Avenue Genoscope sequence ID : CSODG003DA07QP1.
Location/Qualifiers
1. 1900
                                                                                                                                                                  /clone="CSODG003YB14"
/tissue type="B CELLS (RAMOS CELL LINE)"
/cell line="RAMOS CELL LINE"
/clone lib="Homo sapiens B CELLS (RAMOS CELL LINE)"
/clone lib="Homo sapiens B CELLS (RAMOS CELL LINE)"
/note="Vector: pCMVSPORT 6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime end enriched, double-strand cDNA was digested with Not I and cloned into the Not I and EcoRV sites of the pCMVSPORT 6 vector.
Library was not normalized."
                                                                                                                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                           31.2%;
                                                                          24;
                                                                        Score 878.8; DB 9;
Pred. No. 1.2e-104;
4; Mismatches 67;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTCCTTCAAGTCTTCTCTGTTTTTTATTCTTCAACTCTCACTTTCTTAGAGTTTTAGAGAA
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NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection Unpublished (1999)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: LLCM1698 row: i column: 06 High quality sequence stop: 836.
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Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium ()
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/lab host="DHIOB (phage-resistant)"
/clone_lib="NIH MGC 48"
/clone_lib="NIH MGC 48"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
/note="Organ: B-cells; Vector: pOTB7; Note: pot
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/mol_type="mRNA"
/db_xref="taxon:9606"
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BX464578 Homo sapiens B CELLS (RAMOS CELL LINE) Homo sapiens cDNA clone CSODG003YB14 3-PRIME, mRNA sequence.

BX464578 BX464578 GI:31029653
                                                                                                                                                                                                                                                       Sukaryota, Metazoa; Chordata; Craniata; Vertebrata; E
Mammalla; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 854)
Li,W.B., Gruber,C., Jessee,J. and Polayes,D.
Full-length cDNA libraries and normalization
Unpublished (2001)
Contact: Genoscope
Genoscope - Centre National de Sequencage
                                                                                                         Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6672.r For
more information about this cluster, see
http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi?seq=CSIDG001ZF10NP1&cluster=6672.r. Contact:
feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSIDG001ZF10NP1.
Location/Qualifiers
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/organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
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/clone="CSODG003YB14"
/clssue_type="B CELLS (RAMOS CELL LINE)"
/cell line="RAMOS CELL LINE"
/cell line="RAMOS CELL LINE"
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  (RAMOS CELL
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/note="Vector: pCMVSPORT\_6; 1st strand cDNA was primed with a NotI-oligo(dT) primer. Five prime and enriched, double-strand cDNA was digested with Not I and cloned into the Not I and ECORV sites of the pCMVSPORT 6 vector. Library was not normalized."

Best Local Similarity GAACTGCAGGACCTGGGRGCATCCTAAAGTGTCAACGTTTTTTCTATRACTTTTAGGTRGG TTAATAAAGGATCTTAAAATGGGCAGGAGNACTGTGAACAAGACACCCTAATAATGGGTT ATATCCAGTCATGCGCTGTATGTTTTAATCRGCAGAGGCATGTTTTATGTTTGTACAAA ATATCCAATCATGCGCTGTATGTTTTAATCAGCAGAAGCATGTTTTTATGTTTGTACAAA GGACCTCCTAATGAGAGTATCTGGGTGATTGTGACCCCAAACCATCTCTCCAAAGCATTA 1228 CATCCTTTATTATTTDATTCATTTGAGTTRACAGTGGTGTTAGTGATAGATTTTTCTATT CATCCTTTATTATTTGATTCATTTGAGTTAACAGTGGTGTTAGTGATAGATTTTTTCTATT 11.08 ATGAGAGCAGAAGGTAGATCCTAAAAAGCATGGTGAGAGGATCAAATGTTTTTATATCAA 1048 TTCTAGCTGCTTGGGAGGTTGAGGAGGGAGGATGGCTTGAACACAGGTGTTCAAGGCCAG TATAAGAGAGTTGTGACAAAACAGAATGATAAAGCTGCGAACCGTGGCACACGCTCATAG GAAAAACCCCACAAACTTCACATATCATAATTRGCAAACAATTGGAAGGRAGTKGCTTGAA GATGTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAAGTCCCTAATTTA TTAATAAAGGATCTTAAAATGGGCAGGAGGACTGTGAACAAGACACCCTAATAATGGGTT GGACCTCCTAATGAGAGTGTCTGGGTGATTGTGACCCCCAAACCATCTCTCCAAAGCATTA CTTTTCCCTTGACGTTMACTTTCAAGTAACACAAACTCTTCCATCAGGCCATGATCTATA CTTTTCCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGGCCATGATCTATA 1168 CCTGGGCAA 1777 TATAAGAGAGTTGTGACAAAACAGAATGATAAAGCTGCGAACCGTGGGAAACGCTCATAG AGGTCAAGGTTTGCTACATTTTGTATGTGTTTGATGCTTCTCCCAAAGGTATATTAACTA AGGTCAAGGTTTGCTACATTTTGTATGTGTGTGATGCTTCTCCCCAAAGGTATATTAACTA TGTTGGGGAGAGAAAATCTATTGGCTCTCGTGGGTCTCTTCATCTCAGGAATGCCAATC TGTTGGGGAAAAGCTATTGGCTCTCGTGGGTCTCTTCATCTCAGAAATGCCAATC GATTTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAAGTCCCTAATTTA TTCTGGCTGCTTGGGAGGTTGAGGAGGGAGGATGGCTTGNACACAGGTGTTCAAGGCCAG Conservative 29.0%; ; Score 817.4; DB 1; Pred. No. 1.3e-96; 17; Mismatches 16 DB 13; 16; Indels Length 0, Gaps 135 1768 1708 1648 1588 1528 375 1348 1288 15 195 255 315 1468 1408 435 495 555 615 675 735 795 75 0

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lou Staudt
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National Institutes of Health, Mammalian
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AGENCOURT_6855061 NIH_MGC_99
5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (1999)
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                          TGGTTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTTCTGCGA
                                                                                                                                                                             ACATCCTTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGGCTGCCACGTGGAATTG
                                                                                                       CTCTTCCTCCGCTACATCTCGGACTGGGACCCTAGACCCTGGCGCTGCTACCGCGTCACC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:5929977"
/clone="IMAGE:5929977"
/tissue_type="lymphoma, cell line"
/lab_host="DH108 (phage-resistant)"
/clone_lib="NIH_MGC_99"
/clone_lib="NIH_MGC_99"
/clone_lib="NIH_MGC_99"
/note="Gorgan: lymph; Vector; pOTB7; Site_1: XhoI; Site_2:
ECORI; cDNA made by oligo-dT priming. Directionally cloned
into EcoRI/XhoI sites using the following 5' adaptor:
GGCACGAG(G). Size-selected >500bp for average insert size
1.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-cDNA synthesis kit (Stratagene) and Superscript
II RT (Life Technologies). Note: this is a NIH_MGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Library."
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mol_type="mRNA"
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1.3e-95;
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source

/clone="IMAGE:5808181" /tissue\_type="lymphoma, cell line" /lab\_host="DH10B (phage-resistant)"

/organism="Homo sapiens" /mol\_type="mRNA" /db\_xref="taxon:9606"

found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: LLCM2051 row: m column: 14 High quality sequence stop: 665.

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Location/Qualifiers

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Mammalia; Eutheria; Primates; Cat
1 (bases 1 to 1052)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Ma
Unpublished (1999)
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Lou Staudt
CDNA Library Preparation: Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.B. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
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AGENCOURT 6796291 NIH_MGC_99 Homo
5', mRNA Bequence.
BOOSERSE
                                                                                                   Contact: Robert Strausberg,
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                                                                                                   Ph.D.
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Catarrhini; Hominidae;
                                                                                                                                   Mammalian Gene Collection (MGC)
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                                                                                                AACAGTCCTTTCAAGCCTTCTCTGTTTTTATTCTTCAACTCTCACTTTTCTAGAGTTTAC
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/note="Organ: lymph; Vector: pOTB7; Site_1: XhoI; Site_2:
ECORI; CDNA made by oligo-dT priming. Directionally cloned.
Into EcoRI/XhoI sites using the following 5' adaptor:
GCCACGAG(G). Size-selected >500bp for average insert size
1.8kb. Library constructed by Ling Hong in the laboratory
of Gerald M. Rubin (University of California, Berkeley)
using ZAP-CDNA synthesis kit (Stratagene) and Superscript
II.RT (Life Technologies). Note: this is a NIH_MGC
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Pred. No. 2.6e-94;
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JOURNAL
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Best Local Similarity
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Email: seqref@genoscope.cns.fr, Web: www.genoscope.cns.fr
Library was constructed by Life Technologies, a division of
Invitrogen. This sequence belongs to sequence cluster 6672.r For
more information about this cluster, see

http://www.genoscope.cns.fr/
cgi-bin/cluster.cgi/seq=CSOBAGO61ZH04 CSO5792 l&cluster=6672.r.
Contact: Feng Liang Email: fliang@lifetech.com URL:
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID: CSOBAGO61ZH04_CSO5792_1.
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BX391067 Homo sapiens B CELLS (RAMOS CELL LINE) COT 25-NORMA
Homo sapiens cDNA clone CSODL012YD18 5-PRIME, mRNA sequence.
BX391067
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Li,W.B., Gruber,C., Jessee,J. and Polayes,D. Full-length cDNA libraries and normalization Unpublished (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 918)
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                                                                                                                             AGCAGAAGGTAGATCCTAAAAAGCATGGTGAGAGGATCAAATGTTTTTATATCAACATCC
                                                                                                                                                                                                                      CGTGCTGCAATTGGTGCAGTTTTGAATGCAACATTGTCCCCCTACTGGGAATAACAGAACT
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                                TTTATTATTTGATTCATTTGAGTTAACAGTGGTGTTAGTGATAGATTTTTTCTATTCTTTT
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                                                                                             AGCAGAAGGTAGATCCTAAAAAGCATGGTGAGAGGATCAAATGTTTTTATATCAACATCC
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/note="1st strand cDNA was primed with a NotI-oligo(dT)

primer. Five prime end enriched, double-strand cDNA was

digested with Not I and cloned into the Not I and Ecor v

sites of the pCMVSPORT 6 vector. Library was normalized
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/cell type="B CELLS (RAMOS CELL LINE) COT 25-NORMALIZED"
/cell line="RAMOS CELL LINE"
/clone_lib="Homo sapiens B CELLS (RAMOS CELL LINE) COT
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/mol_type="mRNA"
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CCCTTGACGTTTACTTTCAAGTAACACAAACTCTTCCATCAGGCCATGATCTATAGGACC

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Library was constructed by Life Technologies, a division of Invitrogen. This sequence belongs to sequence cluster 6672.r For more information about this cluster, see http://www.genoscope.cns.fr/ cgi-bin/cluster.cgi?seq=CSIDG001ZF10QP1&cluster=6672.r. Contact: Feng/fullength.invitrogen.com/URL: http://fulllength.invitrogen.com/InVitroGen.com/confurlength.invitrogen.com/ InVitroGen Corporation 1600 FEATURES Location/Qualifiers 1. 853 Source /organism="Homo sapiens" /mol type="mRNA" /db_xref="taxon:9606"		Qy 1651 TAAGAAGTTGTGACAAA 1668	Qy 1531 TTGGGGAGAGAAATCTATTGGCTCTCGTGGGTCTCTTCATCAGAAATGCCAATCAG 1590	Qy 1412 GTCTGAAGTAGCAAATCTTCTGGAAACGCAAACTCTTTTAAGGAAGTCCCTAATTTAGAA 1471	Qy 1294 ATTGTTATGGGTGGGGATGGAGGTATAGACCATGCATGGTCAACCTTCAAGCTACTTTA 1351	Db 362 CCCTTGACGTTTACTTTCAAGTAACACAACTCTTCCATCAGGCCATGATCTATAGGACC 421  Oy 1174 TCCTAATGAGGAGTATCTGGGTGATTGTGACCCCAAACCATCTCTCCCAAAGCATTAATATC 1233
686 CAACTTCCAGGAATGTCACACGATGAAATATCTCTGCYGAAGACAGTGGATAAAAAAC 740 AGTCCTTCAAGTCTTCTGTGTTTATTCTTCAACTCTCCACTTTCTTAGAGTTTACAGAA   :	Qy 500 TICAAAGATTATTITTACTGCTGGAATACTTTTGTAGAAAAAAAAAA	Oy  320 TTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGTGGCCGACTTTCTGCGAGGG 379	Qy 200 TCCTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGGCTGCCACGTGGAATTGCTC 259	OY  80 ATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCAATTCAAAAATGTCCGCTGG 139	Query Match 27.7%; Score 780.8; DB 13; Length 853; Best Local Similarity 96.7%; Pred. No. 7.2e-92; Matches 801; Conservative 6; Mismatches 20; Indels 1; Gaps 1;  Oy 20 AAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGGAAGAAGACACTCTGGACACACT 79	/clone="CS0DG003YB14"  /tissue type="B CELLS (RAMOS CELL LINE)"  /cell_line="RAMOS CELL LINE"  /clone_lib="Homo sapiens B CELLS (RAMOS CELL LINE)"  /clone_lib="Homo sapiens B CELLS (RAMOS CELL LINE)"  /note="Vector: pCMVSPORT 6; 1st strand cDNA was primed  /note="Vector: pCMVSPORT 6; 1st strand cDNA was primed  with a NotI-oligo(dT) primer. Five prime end enriched,  double-strand cDNA was digested with Not I and cloned into  the Not I and ECORV sites of the pCMVSPORT 6 vector.  Library was not normalized."

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cgi-bin/cluster.cgi?seq=CSOBAIO48ZHO8 CSO4576 l&cluster=6672.r.
Contact : Feng Liang Email : fliang@lTfetech.com URL :
http://fulllength.invitrogen.com/ InVitroGen Corporation 1600
Faraday Avenue Genoscope sequence ID : CSOBAIO48ZHO8_CSO4576_1.
Location/Qualifiers
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Email: seqref@genoscope.cns.fr

Library was constructed by Life Technologies, a division of

Invitrogen. This sequence belongs to sequence cluster 6672.r For

more information about this cluster, see
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Genoscope - Centre National
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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iens cDNA clone
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Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium () Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 743) NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health, Mammalian Gene Collec Plate: LLCM1626 row: g column: High quality sequence stop: 740. DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Unpublished (1999) Homo sapiens (human) Contact: Robert Strausberg, Ph.D. organism="Homo sapiens" location/Qualifiers GI:13917530 743 sapiens ğ mRNA line s cDNA clone Hominidae; Collection (MGC) IMAGE:4766234 5', Euteleostomi; EST 01-MAY-2001 θĠ,

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/clome_lib="NHH_MGC_48"
/clome_lib="NHH_MGC_48"
/clome_lib="NHH_MGC_48"
/clome_lib="NHH_MGC_48"
/clome_organ: B-cells; Vector: pOTB7; Site_1: XhoI;
Site_2: EcoRI; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Size-selected >500bp
for average insert size 1.8kb. Library constructed by Ling
Hong in the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZAP-cDNA synthesis kit
(Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NHH_MGC Library."
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium ()
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: LLCM1704 row: o column: 06 High quality sequence stop: 675.
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National Institutes of Health, Mammalian Gene
Unpublished (1999)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae;
1 (bases 1 to 820)
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   GGCCGACTTTCTGCGAGGGAACCCCAACCTCAGTCTGAGGATCTTCACCGCGCGCCTCTA
                                                                                                                                                                                                                                 GAGGCGTGACAGTGCTACATCCTTTTCACTGGACTTTGGTTATCTTCGCAATAAGAACGG
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                                                                             CTGCTACCGCGTCACCTGGTTCACCTCCTGGAGCCCCTGCTACGACTGTGCCCGACATGT
                                                                                                                   CTGCCACGTGGAATTGCTCTTCCTCCGCTACATCTCGGACTGGGACCTAGACCCTGGCCG
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Location/Qualifiers
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/lab host="DH10B (phage-resistant)"
/clome_lib="NIH_MGC_48"
/clome_lib="NIH_MGC_48"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
Site_2: EcoRI; cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the following 5; adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Ling Hong in the laboratory of Gerald M. Rubin (University of California, Beckeley) using ZB-cDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."
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/db_xref="taxon:9606"
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http://image.llnl.gov
Plate: LLCM1707 row: k column:
High quality sequence stop: 638.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Unpublished (1999)
Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt,
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National Institutes of Health, Mammalian Gene Collection
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 820)
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BG755526.1 GI:14066179
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602716206F1 NIH_MGC_48 Homo sapiens
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CDNA Library Preparation: Ling Hong/Rubin Laboratory
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can be
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/lab host="DHIOB (phage-resistant)"
/clome_lib="NHIOB (phage-resistant)"
/clome_lib="NHI MGC_48"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
/site_2: ECORI, cDNA made by oligo-dT priming.
Directionally cloned into EcoRI/XhoI sites using the
following 5' adaptor: GGCACGAG(G). Size-selected >500bp
for average insert size_1.8kb. Library constructed by Ling
Hong in the laboratory of Gerald M. Rubin (University of
California, Berkeley) using ZBP-cDNA synthesis kit
(Stratagene) and Supersoript II RT (Life Technologies).
Note: this is a NHH_MGC Library."
                                                                                                                                                                                                                                                                       organism="Homo sapiens"
|mol_type="mRNA"
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                                                                                                                                                                                                                                    clone="IMAGE:4856568"
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1 (bases 1 to 693)
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National Institutes of Health, Mammalian Gene Collection (MGC)
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                                          ACAGTGGATAAAAAACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCACTTT
                                                                                                   ACAGTGGATAAAAAACAGTCCTTCAAGTCTTCTCTGTTTTTATTCTTCAACTCTCACTTT
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/(ab host="DHIOB (phage-resistant)"
/(clone_lib="NHI-MGC_48"
//note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
//note="Organ: B-cell
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mol_type="mRNA"
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Pred. No. 6.5e-79;
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Plate: LLCM1207 row: a column: 16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Louis M. Staudt,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 942)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
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602244657F1 NIH_MGC_48 Homo sapiens cDNA clone IMAGE:4335639
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rissue Procurement: Louis M. Staudt, M.D., Ph.D.

CDNA Library Preparation: Ling Hong/Rubin Laboratory

CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)

DNA Sequencing by: Incyte Genomics, Inc.

Clone distribution: MGC clone distribution information can
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                            GAACCATCATTAATTGAAGTGAGATTTTTTCTGGCCTGAGACTTTGCAGGGGAGGCAAGAAGA
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GAACCATCATTAATTGAAGTGAGATTTTTCTGGCCTGAGACTTGCAGGGAGGCAAGAAGA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   quality sequence stop:
                                                                                           Conservative
                                                                                                                                                                                                /clone lib="NIH MGC 48"
/clone lib="NIH MGC 48"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
Site_2: EccRI; cDNA made by oligo-dT prining.
Directionally cloned into EccRI/XhoI sites using the following 5' adaptor: GGCACGAG(G). Size-selected >500bp for average insert size 1.8kb. Library constructed by Lir Hong in the laboratory of Gerald M. Rubin (University of California, Berkeley) using ZAP-CDNA synthesis kit (Stratagene) and Superscript II RT (Life Technologies).
Note: this is a NIH_MGC Library."
                                                                                                                                                                                                                                                                                                                                                                                                                          /mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:4335639"
/clone="type="primary B-cells from tonsils (cell line)"
/tissue_type="primary B-cells from tonsils (cell line)"
/lab_host="DH10B (phage-resistant)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Homo sapiens"
mol_type="mRNA"
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CACTCTGGACACCATATGGACAGCCTCTTGATGAACCGGAGGAAGTTTCTTTACCAA-T

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1 (bases 1 to 664)

NIH-MGC http://mgc.noi.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)

Unpublished (1999)
                                                                                                                                          Homo
                                                                                                                                                                                               BG754140
BG754140.1 GI:14064793
                                                                                                                                                                                                                                    mRNA sequence.
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Tissue Procurement: Louis M. Staudt, M.D., Ph.D.
cDNA Library Preparation: Ling Hong/Rubin Laboratory
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Incyte Genomics, Inc.
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
http://image.llnl.gov
b column: 22
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/lab_host="DBHOB (phage_resistant)"
/clone_lib="NIH_MGC_48"
/note="Organ: B-cells; Vector: pOTB7; Site_1: XhoI;
/note:
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Pred. No. is the number of results predicted by chance to have

REFERENCE AUTHORS TITLE JOURNAL FEATURES

Unclassified.

(bases 1 to 20)

(cros,P., Kurfurst,R., Battail,N. and Piga,N. Process and device for assaying a hapten Patent: US 5849480-A 5 15-DEC-1998;

Location/Qualifiers

RESULT 1
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AR064875 Sequence 5 AR064875 AR064875.1

from

patent

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linear

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29-SEP-1999

ALIGNMENTS

GI:5995091

SOURCE ORGANISM

Unknown Unknown score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## Result No. a 0 0 0 0 0 0 0000 იი Score Query Match Length DВ 136180 173618738 17222466 172236083 172260 AR085926 AR087520 AR093312 AR118970 AR121692 AR123335 AR141070 AR154115 AR164658 AR064875 AR080000 IJ SUMMARIES AR222466 Sequence AR266075 Sequence AR266075 Sequence AR276394 Sequence AR305124 Sequence AR309228 Sequence AR309228 Sequence AR34936 Sequence AR34936 Sequence AR34936 Sequence AR34936 Sequence AR34936 Sequence AR349653 Sequence AR429653 Sequence AX004876 Sequence AX0048779 Sequence AX045779 Sequence AX104364 Sequence AX1104364 Sequence AX1104364 Sequence AX119624 Sequence AX119624 Sequence AX196234 Sequence AX196234 Sequence AX355811 Sequence AX355811 Sequence AX4401125 Sequence AX440111 Sequence AR085926 Sequence AR087520 Sequence AR093312 Sequence AR118970 Sequence AR121692 Sequence AR123335 Sequence AR141070 Sequence AR14115 Sequence AR164658 Sequence E12676 Anti-HTLV-1 I36180 Sequence 16 AR213738 Sequence AR064875 Sequence AR080000 Sequence Description

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Patent Location/Qualifiers
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Tan, P., Skinner, M. and Prestidge, R.
Compounds and methods for treatment and infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 20)
Watson, J.D. and Tan, P.L.J.
Methods and compounds for the treatment
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Location/Qualifiers
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Tan,P., Hiyama,J., Visser,E., Skinne:
Mycobacterium vaccae antigens
Patent: US 600131-A 83 14-DEC-1999;
Location/Qualifiers
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pitsch,S., Weiss,P.A. and Jenny,L.
Ribonucleoside-derivative and method
Patent: US 5986084-A 1 16-NOV-1999;
Location/Qualifiers
                                       Unknown.
Unclassified.
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1 (bases 1 to 20)
Uchida, K., Uchida, T., Tanaka, Y., Matsuda, Y. and Kondo,
Antisense nucleic acid compound targeted to VEGF
Patent: US 6150092-A 96 21-NOV-2000;
                                                              Unknown.
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Bruice, T.C. and Dev, A.P.
Bruore, T.C. and Dev, A.P.
Deoxynucleic alkyl thiourea compounds and uses thereof
Patent: US 6169176-A 1 02-JAN-2001;
Location/Qualifiers
                                                                                                                                                                                       Unknown
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AR123335
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                                                  Similarity
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                                                                                         /organism="unknown"
/mol_type="unassigned DNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                organism="unknown"
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AR141070
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AR164658
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Huang Z. and Szostak, J.W.

Simple and efficient method to label using DNA polymerase and a synthetic
Unknown.
            Unknown.
                                AR164658.1
                                                              AR164658
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Location/Qualifiers
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Manoharan, M. and Maier, M.
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/mol_type="unassigned DNA"
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136180/c
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OS None
OC Artificial sequences.
PN JP 1997052898-A/10
PD 25-FEB-1997
PF 09-AUG-1995 JP 199522460
PI MIZUGUCHI MASATSUGU, KURK
KOYANAGI YOSHIO,
PI YAMAMOTO NAOKI
PC CO19121/04/A6IKX11/70;
CC strandedness: Single;
CC topology: Linear;
CC hypothetical: NO;
CC anti-sense: Yes;
PH Key Location
FH Key 1...20
FT source 1...20
FT source 1...20
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          Sequence
136180
136180.1
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High throughput functional screening of cDNAs
Patent: US 6274321-A 13 14-AUG-2001;
Location/Qualifiers
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Mizuguchi,M., Kurosaki,N., Makino,K., Ko
ANTI-STLV-I ANTI-SENSE OLIGONUCLEOTIDE
Patent: JP 1997052898-A 10 25-FEB-1997;
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JP 1997052898-A/10
25-FEB-1997
09-AUG-1995 JP 1995224606
MIZUGUCHI MASATSUGU, KUROSAKI NAOKO, MAKINO KEISUKE,
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                                                                                                                                                                                                                                                                           /organism='Artificial sequences'
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           GI:2086693
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/mol_type="genomic DNA"
/db_xref="taxon:32644"
                                  from patent
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                                    Unclassified.

(bases 1 to 20)

Kurz,M., Lohse,P. and Wagner,R.

Peptide acceptor ligation methods

Patent: US 6429300-A 26 06-AUG-2002;

Location/Qualifiers
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AR213738
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Heller, M.J. and Tu, E.
Active programmable electronic devices
analysis and diagnostics
Patent: US 5605662-A 16 25-FEB-1997;
                                                                                                          Unknown
                                                                                                                                                   Sequence 26 from patent US
AR222466
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Patent: US 6406704-A 83 18-JUN-2002;
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Unclassified.
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Tan, P., Visser, E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                         Unknown
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/mol_type="genomic |
       /mol_type="genomic
                   organism="unknown"
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   nucleic search, using sw model
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2818
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   0000000000000000
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Copyright (c) 1993 - 2004 Compugen Ltd.
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                       AAA40449
AAA40448
AAA96372
AAZ35378
                                                    AAX27533
AAZ11326
                                                                          AAT86606
AAZ37736
 AAA50193
AAD14808
                                                                                                                              AAQ75596
                                                                   AAZ37737
               AZ9111
                                                                                         AAV34591
                                                                                                  1AV85582
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                                                           Aaz37737
Aax27533
                                                                                                                                                                                 Description
               Aaz91117
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AAH78547 AAF28351 AAS01235 AAS29506 AAS29505	AAF99099 AAF99431 AAH38246 AAH46465	AAF60090 AAF63428 AAF28481 AAF80891 AAF80890 AAF99427 AAF99427	AAK95176 AAC87238 AAC87230 AAC87241 AAC87241 AAS10402 AAS10402
Aah78347 Aaf28351 Aas01235 Aas29506 Aas29506	Aa199099 Aaf99431 Aah38246 Aah46465	Ads 5029 Ads 5328 Ads 528491 Ads 60890 Ads 10371 Ads 99427	Aak95176 Aac87238 Aac87238 Aac87221 Aac810402 Aad16997
	1 Immunosti 6 SNP speci 5 Oligonucl		

## ALIGNMENTS

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3'-amino modified oligonucleotide
                                                                                                        RNA; antisense strands; detection; ss.
                                                          90DE-04039488
                                                                91EP-00120935
                                                                                  /*tag=  a
/note= "3-amino modified"
                                                                                            Location/Qualifiers
                                              Konrad R,
                                                                                                                                   BP.
                                              Mag
                                              3
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The sequence is an example of a dye coupled 3'-amino modified oligo-nucleotide, it can be used in the synthesis of DNA and RNA nucleosides, nucleotides and oligonucleotides and for the synthesis of opposite strands in the presence of a template strand and in fluorescence microscopic and macroscopic detection in vivo and in vitro of genetic material. It is labelled with a fluorescent dye. See also AAQ25566 and

New dye-coupled modified nucleosides, nucleotides and oligo:nucleotides useful for synthesis of antisense DNA and RNA strands in presence of template, also for in=vivo and in=vitro detection of genetic material.

Example; Page 9; 17pp; German.

AAQ25567.

(Updated on

25-MAR-2003 to

correct PN field.)

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RESULT 2
AAQ33554/c
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Matches 20
            Query Match
Best Local
 Matches
                                                                                                                specification and indexed herein (see below). The sequences upstream and downstream of the microsatellite sequence were used to generate the required PCR primers for in vitro amplification of the corresp. microsatellite (using the program OPTIPRIM). The microsatellites may be used to identify individuals, for parentage testing, and in the genetic mapping of economic trait loci, or genes involved the determinism of
                                                                                                                                                                                              The sequence is that of a bovine microsatellite sequence obtd. by screening a library of bovine MboI DNA fragments of between 250 and 500 bp with an (AC)15 and a (TC)15 oligonucleotide probe. One out of 50 clones cross-hybridised. Assuming independent distribution of microsatellites and MboI sites, the frequency of (T6)n >9 microsatellites in the bovine genome is estimated at >100, 000. The sequence information for ca. 230 such bovine microsatellites is summarised in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR; selection; primers; genetic mapping; traits;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           06-AUG-1992
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02-FEB-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAQ33554 standard;
                                                    Sequence
                                                                                                                                                                                                                                                                                                      Table 7; Page 150; 517pp; English.
                                                                                                                                                                                                                                                                                                                                 Polymorphic bovine DNA markers - used in genetic identification, gene mapping, and selective breeding.
                                                                                                                                                                                                                                                                                                                                                                           WPI; 1992-284684/34.
                                                                                                                                                                                                                                                                                                                                                                                                   Georges M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                       15-JAN-1991;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 15-JAN-1992;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WO9213102-A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Microsatellite
                                                                              breeding. See
field.)
                                                                                       economically important traits esp.
breeding. See also AAQ33501-34437.
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                                                    BP;
Conservative (
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(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence from clone AGLA247.
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                                                    0 A;
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                                                  0 C; 0 G; 20 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        amplification; ss.
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Pred. No.
             Score 20;
Pred. No.
 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    breeding; cattle;
                                                                                          (Updated on 25-MAR-2003
                                                                                                      in cattle, to allow selective
             1.5e+03;
                          DB 2;
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                        Length 20;
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AAAAAAAAAAAAAAAAAAA 1818

Location/Qualifiers

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RESULT 3
AAQ58578
ID AAQ5
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AC AAQ5
XX
RESULT 4
AAQ9425/c
ID AAQ942
XX AAQ942
XX AAQ942
XY 25-MAR
DT 24-AUG
XX Alpha-
XX Oligon
KW Oligon
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Best Local
                                                                                                                                                                                                                                                                                                                                                                  a membrane which comprises using a receptor that uses salt bridgin, aromatic stacking, H bonding and chelation to recognise the nucleic deriv. AAQ56305, AAQ58577-86 are nucleic acid derivs used in the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAQ58578;
                                                                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Novel receptor; nucleic acid; transport; oligo; ss
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAR-2003
21-AUG-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAQ58578
                       Synthetic.
                                               Oligonucleotide ligand; steroid hormone; hapten; immunodetection; estradiol; alpha-anomer; ss.
                                                                                                         25-MAR-2003
24-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Transport of nucleic acid derivs. across membranes - which use salt bridging, aromatic stacking, hydrogen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       WPI; 1994-082846/10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Usman N,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      13-AUG-1993;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            receptor
                                                                                   Alpha-anomeric oligonucleotide ligand 1803 for oestradiol hapten
                                                                                                                                               AAQ94205;
                                                                                                                                                                      AAQ94205
                                                                                                                                                                                                                                                                                                                                                      examples. (Updated on 25-MAR-2003 to correct PN field.)
                                                                                                                                                                                                                                                                                                                                                                                            The inventors claim a method of transporting a nucleic acid a membrane which comprises using a receptor that uses salt be
                                                                                                                                                                                                                                                                                                                                                                                                                              Example; Table 1, page 38; 103pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        chelation.
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                                                                                                                                                                      standard;
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                                                                                                                                                                                                                                                                                                                                BP;
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(first en
                                                                                                         (revised)
(first entry)
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                                                                                                                                                                       DNA;
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Pred. No.
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1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hydrogen bonding and
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                                                                                                                                                                                                                                                                                                      Length 20;
                                                            immobilisation;
                                                                                                                                                                                                                                                                                  Indels
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RESULT 5
AAQ75563/c
ID AAQ755
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AC AAQ755
XX
DT 04-AUG
DX
Revers
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Analys
XW Analys
XW aggreg
XX
Synthe
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                                                                                                                                                                                                                                                                                                                                                      Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Assay device for hapten or its specific antibodies - comprises support having competitive reagent immobilised via nucleic acid ligand to impr
                                     JP06303997-A
                                                            Synthetic
                                                                                                                                                                                             AAQ75563 standard;
             01-NOV-1994
                                                                                   aggregate;
                                                                                                 Analysis;
                                                                                                                      Reverse transcription primer used in
                                                                                                                                               04-AUG-1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Example 1; Page 10; 39pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Cros
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (CROS/)
(KURF/)
(BATT/)
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                                                                                                                                                                      AAQ75563
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              modified_base
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                                                                                                                                                                                                                                                                                                                   Local
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BATTAIL N.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PIGA N.
                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                               AAAAAAAAAAAAAAAAAAA 1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Kurfurst R,
                                                                                              gene expression; reverse transcription;
                                                                                   restriction enzyme;
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                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     and accessibility.
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/mod_base= OTHER
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                                                                                                                    cDNA analysis technique.
                                                                                                                                                                                                                                                                                                                   1.5e+03;
                                                                                                                                                                                                                                                                                                                             DB 2;
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                                                                                                                                                                                                                                                             Analysis of cDNA and gene expression -
by digestion with restriction enzymes.
                                                                                                                                                                                                                                                                                                                                      WPI; 1995-018287/03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Reverse transcription
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Analysis;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
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                                                                                                                                                                                                                                                                                                                                                                                    CORP
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A method for the analysis of cDNA comprises (a) preparing an aggregate of double-stranded cDNAs by using an aggregate of mRNAs and a plural type of labelled reverse transcription primers (GENESEQ files AQ75547-Q75798) and using the aggregate of mRNAs as the template for each reverse transcription primer; (b) digesting each of the prepared aggregates of the double-stranded cDNAs with restriction enzyme and; (c) electrophoresing the digested aggregate of cDNAs in seperate lanes. The method can be used to analyse gene expression rapidly and easily

Disclosure; Page 5; llpp; Japanese

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                                                                                            RESULT 7
AAQ90405/c
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                                                                   Query Match
                                                                                                          The sequences represented by, AAQ90402-15 are synthetic DNA probes containing 5' amino termini. The sequences shown in AAQ90390-401 are synthetic DNA probes with 3' ribonucleoside termini. These sequences were specific for the polymorphisms of HLA gene dQa. The sequences were used in the device of the invention. This is a self-addressable electronic device (SAED) that can be used to carry out multi-step and multiplex reactions, such as nucleic acid hybridisations. The advantages of this method are that these reactions can be carried out with complete and precise electronic control, and that the rate, specificity and sensitivity of these reactions are greatly improved at micro-locations
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                New self-addressable electronic devices - used for multi-step and multiplex reactions such as DNA hybridisation(s), clinical diagnostics
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                                                                                            Sequence 20
                                                                                                                                                                                                                                                Example 1;
                                                                                                                                                                                                                                                                                                                      WPI; 1995-185870/24.
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                                                         Local
                                                                                                                                                                                                                                                                        bio:polymer synthesis.
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                                                                                                                                                                                                                                               Page 41; 86pp; English.
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                                                                                         BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
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                                                                                                                                                                                                                                                                                                                                                                                            93US-00146504
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                                             Mismatches
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                                                         1.5e+03;
                                                                    DB 2;
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                                                                   Length 20;
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06-JUN-1997

(first

entry)

Anti-HTLV antisense reference oligonucleotide HT

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Matches Query Match Best Local

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GCTCACGCCTGTAATCCCAG

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Conservative

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                                                                                                                                                                                                                                                                                  repeats) for detecting a mutation in the locus of chromosome 14 associated with a presentle form of Alzhelmer's disease. Each of the probes hybridises with one of the two human chromosomal DNA segments cloned in the CEPH yeast artificial chromosome (YAC) library under the accession numbers YAC 934A3 identifiable by genetic marker D14S251) and YAC 854F5 (identifiable by genetic marker D14S251) and for diagnosis of the form of Alzheimer's disease associated with chromosome 14 by a method comprising making a preparation of metaphase chromosomes from the patient's lymphoblastoid cells on a microscope slide, contacting the preparation under DNA hybridisation conditions with hybridises with YAC 905C2 from the same library, and detecting the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAT73704 standard; DNA; 20
                                                                                                                                              Sequence 20 BP; 4 A; 4 C; 8 G; 4 T; 0 U; 0 Other;
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                                                                                                                                                                                                                          pairs of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Probes for diagnosing Alzheimer's disease - hybridising with chromosome 14 segments cloned in yeast artificial chromosome library.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WPI; 1997-353201/33.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      28-OCT-1994;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PCR primer
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                                                                                                                                                                                                                                                            hybridised probes and their relative positions on a significant number of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR primers AAT73703-4 were used to prepare probes (containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Example 1; Page 8; 21pp; French.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Weissenbach J,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28-OCT-1994;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27-JUN-1997.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FR2742758-A1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ASFR-) ASSOC
                                                                                                                                                                                                                              chromosomes
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    used
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FR CONTRE MYOPATHIES ASSOC LOI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Heilig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         94FR-00012941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94FR-00012941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ö
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 probes for diagnosing Alzheimer's disease.
Score 20; DB 2; Le
; Pred. No. 1.5e+03;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oligonucleotides having a partial sequence consisting of at least 15 bases of AAT63641 (an antisense oligo complementary to a region of the tax gene which can inhibit human T-cell lymphotropic virus type 1 (HTIV-1) viral antigen expression) are claimed. In an example, six antisense oligos were designed, T1-T6 (AAT63650-55) and were compared to six oligos derived from other regions of HTIV-1, i.e. SJ1 (splice junction), P1 (p21), R1 (rex), RR1 (rex response element), E1 (env) and G1 (gag), four reference oligonucleotides TIS (tax-sense), HC (dC20), HT (dT20) (AAT63647-49) and a random 20mer (RAN) in a HTIV-1 virus antigen expression inhibiting test. Oligonucleotide T1 gave the best results
               15-APR-1997;
05-JUN-1997;
                                                                                                                                                   Synthetic
                                                                                                                                                                                                    LRP5; LDL-receptor related protein; LRP-3; IDDM; diagnosis; endocytosis; insulin dependent diabetes mellitus; autoimmune disease; glomerulonephritis; inflammation; viral infection; osteoporosis;
                                                                                                                                                                                                                                                                                       10-FEB-1999
                                                                                                                                                                                                                                                                                                                  AAV85582;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anti-HTLV-1 anti-sense oligo:nucleotide - is complementary to region of tax gene from human T-cell lymphotropic virus type 1 and inhibits viral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     09-AUG-1995;
                                                      15-APR-1998;
                                                                                 22-0CT-1998
                                                                                                            WO9846743-A1
                                                                                                                                                                              hypercholesterolemia; Alzheimer's
FCR primer; ss.
                                                                                                                                                                                                                                                                                                                                          AAV85582 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Example 1; Page 8; 10pp; Japanese.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           09-AUG-1995;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          antisense; complementary; tax gene; inhibit; HTLV-1; human T-cell lymphotropic virus type 1; viral antigen expression;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (SOYA-) SOYAKU GIJUTSU KENKYUSHO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                        1799 ААЛАЛАЛАЛАЛАЛАЛАЛАЛ 1818
                                                                                                                                    sapiens.
                                                                                                                                                                                                                                                           PCR primer GpI 1F.
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                                                                                                                                                                                                                                                                                                                                                                                                             AAAAAAAAAAAAAAA 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BP; 0 A; 0 C; 0 G; 20 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                      (first entry)
               97US-0043553P
97US-0048740P
                                                      98WO-GB001102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95JP-00224606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   95JP-00224606.
                                                                                                                                                                                                                                                                                                                                          DNA; 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; +-
                                                                                                                                                                                                                                                                                                                                           먪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 20;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                         disease;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.5e+03;
hes 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 2;
                                                                                                                                                                                      low density lipoprotein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
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ID AAV34591

ID AAV34591

XX AC AAV3

XX AC AAV3

XX M. v

XX M. v
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               receptor related protein, previously designated IRP-3). AAV8552 to AAV85586 represent PCR primer used for obtaining LRP5 cDNA. Nucleic acid molecules (IAMMs) encoding LRP5 can be used for determining if an individual is susceptible to insulin dependent diabetes mellitus (IDDM). The NAMs or proteins can be used for reducing triglyceride levels in the serum of an individual. Therapies that affect LRP5 may also be useful in the treatment of autoimmune diseases such as glomerulonephritis, diseases and disorders involving disruption of endocytosis and/or antigen presentation, cytokine clearance and/or inflammation, viral infection, pathogenic bacterial toxin contamination, elevation of free fatty acids or hypercholesterolemia, type 2 diabetes, osteoporosis, Alzheimer's disease and cardiovascular disease. Products from the present invention
                                                                                                                                                                                              29-AUG-1996;
12-JUN-1997;
                                                                                                                                                                                                                                                                                                                                      05-MAR-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mycobacteria
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacterium vaccae; antigen; therapy; prevention; cytokine production; M. tuberculosis; immune response enhancer; cell proliferation;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAV34591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAV34591 standard; DNA; 20 BP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20 BP; 4 A; 6 C; 5 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             New isolated LDL-receptor related protein - used to develop products treating, e.g. elevated triglyceride levels, diabetes, autoimmune disorders, inflammation or Alzheimer's disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Todd JA, Hess JW, Caskey CT, Hey P, Kawaguchi Y, Merriman Phillips MS, Twells RCJ;
                                                                                                                                                                                                                                                                                  28-AUG-1997;
                                                                                                                                                                                                                                                                                                                                                                                             WO9808542-A2
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mycobacterium
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          25-AUG-1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              can also be used for detection,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The present invention describes LRP5 (low density lipoprotein (LDL)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 12; Page 98; 200pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                WPI; 1998-594573/50
                                                                                                                                          (GENE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (WELL ) WELLCOME TRUST (MERI ) MERCK & CO INC.
                                                                                   ָּט
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1901 CAGGAGTTTGAGACCAGCCT 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
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20; Conserv
                                                                                 Hiyama J,
                                                                                                                                        GENESIS RES & DEV CORP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WELLCOME TRUST LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   infection; vaccine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (first entry)
                                                                                                                                                                                            96US-00705347.
97US-00873970.
                                                                                                                                                                                                                                                                                97WO-NZ000105.
                                                                                 Visser E,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence hybridising oligo
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
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Pred. No.
                                                                                 Skinner MA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cox
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5 T; 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           diagnosis and drug screening
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RD, Gerhold D, Hamm
Metzker ML, Nakagawa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 2; Lt
1.5e+03;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                 Scott LM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 20
                                                                                 Prestidge RL
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RESULT 12
AAT8666/c
ID AAT8666
XX AAT866
XX AAT866
XX AAT866
XX Oligon
XX Capill
KW Capill
KW Polyac
XX Synthe
XX O4-DEC
XX U09745
XX U09745
XX U09745
XX U09745
XX U09745
XX LNOVS
PF 23-MAY
XX WEGAT
AN WEGAT
XX WEGAT
AN WEGAT
XX WEGAT
AN AN INTERCET
CC Proces
CC Felaces
CC Felaces
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CC V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
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process using capillary affinity gel electrophoresis. The invention relates to selective separation of electrically charged target molecule in an analytical mixture. It comprises capillary affinity gel electrophoresis using a capillary tube which is at least partly filled with a polymer gel. Receptors for target molecules are covalently bound to the polymer. An electric field of at least 50 volts/cm is applied. T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mycobacterium vaccae detection, therapy ar
                                                                                                                                                                    A mixture of oligonuclectides (AAT86604-7) were separated by a new
                                                                                                                                                                                                                                                                                                                                     affinity gel electrophoresis using target molecules are bound.
                                                                                                                                                                                                                                                                                                                                                                    Separation of electrically charged target molecules - by capillary affinity gel electrophoresis using polymer-gel to which receptors for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-DEC-1997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Capillary afinity gel electrophoresis; separation; polymer-gel;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Oligonucleotide separated by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-JUN-1998
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                                                                                                                                                                                                                                                                    Example D3; Page 25; 41pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           WPI; 1998-041763/04
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAAAAAAAAAAAAAAA 1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Paulus A,
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Pred. No.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멂
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    capillary tube is charged with the analytical mixture. In a first separation stage, the target molecules in the mixture are bound to the receptors and the remaining components are eluted, optionally whilst splitting open. In a second stage, the elution conditions are changed, optionally in stages, so that the affinity of the target molecules for the receptor is eliminated and the target molecules are eluted and detected, optionally whilst splitting open. The process is useful for such as oligonucleotides, peptides or carbohydrates. It may be used, e.g. for isolation of specific proteins and DNA molecules, purification of antibodies, analysis of antisense compounds or screening for enzyme inhibitors. The process achieves higher resolution and selectivity than processes, especially in the case of complex biological
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
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                                                                                                                                                                                                                                                                                                                                              WPI; 1999-610754/52
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26-MAR-1998;
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lung cancer; soft to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              antisense;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Human mdm2 gene;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAZ37736
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gene; proliferation; tumour; phosphorothicate; p53;
modulation; oligonucleotide; expression; inhibition
feration; blood cancer; brain cancer; breast cancer;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BP; 0 A;
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                                                                                                                                                                                                                                    English.
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Pred. No.
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                                                                                                                                                                                                                                                                                        hyperproliferative conditions.
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AAZ37473-Z37738 represent human mdm2 phosphorothioate oligonucleotides.
AAZ37471, AAZ37472, AAZ37739, AAZ37740 and AAZ37741 are used in the exemplification of the present invention. The present invention describes novel nucleotide antisense compounds, targetted to the 5' untranslated, translation termination codon, or 3' untranslated region of a nucleic acid encoding human mdm2, that modulates expression of human mdm2. The oligonucleotides mediate their effect by antisense inhibition of

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                                                                             AAZ37473-Z37738 represent human mdm2 phosphorothioate oligonucleotides. AAZ37471, AAZ37472, AAZ37739, AAZ37734 and AAZ37731 are used in the exemplification of the present invention. The present invention describes novel nucleotide antisense compounds, targetted to the 5' untranslated, translation termination codon, or 3' untranslated region of a nucleic acid encoding human mdm2, that modulates expression of human mdm2. The oligonucleotides mediate their effect by antisense inhibition of typerproliferative gene expression. The antisense compound is used to treat an animal having a disease or condition associated with mdm2, particularly a hyperproliferative condition, more particularly cancer, especially of the blood, brain, breast, lung or soft tissue, or psecially, fibrosis, atherosclerosis or restenosis
                                                          Sequence
                                                                                                                                                                                                                                                                                  Example 9; Page 55; 157pp; English.
                                                                                                                                                                                                                                                                                                                                                                            Miraglia LJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ното
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human mdm2 gene; proliferation; tumour; phosphorothicate; p53; antisense; modulation; oligonucleotide; expression; inhibition; hyperproliferation; blood cancer; brain cancer; breast cancer;
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                                                                                                                                                                                                                                                                                                                 New antisense compounds used to treat
                                                                                                                                                                                                                                                                                                                                                                                                                                      26-MAR-1998;
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                                                            BP; 4 A; 7 C; 3
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               1.5e+03;
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                                                            Other;
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Ś
                                                                                                                                                                                                                                                cc nucleotide sequence, particularly by machine synthesis. The groups compectified above, apart from those on silyl, are those particularly for the cyanoethyl phosphoramidate coupling. Uses of the oligoribonucleotide products in diagnosis, therapy, and as research tools, are well known, and are not dealt with in detail. (II) is an intermediate for (I). The silyloxymethyl halide reagent is easy to prepare, and yields are high. Introduction of the silyloxymethyl group into the ribonucleoside is celiminating particularly the prior art problem of 2' to 3' isomerisation. The methylenedioxy group spacer between the silyl group and nucleoside is compliance. In less steric hindrance than bulky direct silyloxy coupling. Purer products are stabilty, and second, higher yields in coupling. Purer products are therefore obtained than in prior art, coupling. Purer products are therefore obtained than in prior art, coupling. Purer products are therefore obtained than in prior art, coupling larger quantities and longer chains of oligoribonucleotides to be synthesised successfully, and in shorter times
                                                                                                Query Match
Best Local
                                                                      Matches
                                                                                                                                                                                              Sequence 20 BP; 0 A; 0 C; 0 G; 0 T; 20 U; 0 Other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2-Silyloxymethyl ribonucleosides and their phosphonate derivatives - have high purity, use in machine synthesis of ribonucleic acids, enable longer oligonucleotide chain construction, and larger amounts.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            The invention relates to silyloxymethyl protected D- or L-ribonucleosides and their phosphonates (I), and silyloxymethyl halides (II). (I) are intermediates for synthesis of RNA-oligonucleotides with predetermined
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Example 6; Page 25; 38pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (PITS/) PITSCH S. (WEIS/) WEISS P A. (JENN/) JENNY L.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17-AUG-1998;
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phosphoramidate coupling; isomerisation;
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ilarity 100.0%;
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Job time : 1113 secs

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Minimum
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seq length: 20
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         nucleic search, using sw model
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Match
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1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*

3: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*

4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*
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US-08-997-080-83
US-08-997-362-83
US-08-965-780-1
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US-09-280-805-266
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US-09-173-9368-14
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US-09-736-958A-5
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US-09-976-978A-58
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Sequence 16, Appli
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Sequence 1, Appli
Sequence 266, App
Sequence 1, Appli
Sequence 14, Appli
Sequence 62, Appl
Sequence 83, Appl
Sequence 83, Appl
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Patent No. 5605662
GENERAL INFORMATION:
APPLICANT: Heller, Michael J.; and
TITLE OF INVENTION: SELF-ADDRESSAB;
TITLE OF INVENTION: MICROELECTRONI
TITLE OF INVENTION: MOLECULAR BIOLA
TITLE OF INVENTION: DIAGNOSTICS
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US-08-146-504-16
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US-08-146-504-16/c
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   Query Match
Best Local Similarity
                                                                                                                TELEFAX: (213) 955-04
TELEX: 67-3510
INFORMATION FOR SEQ ID NO:
                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Warburg, Richard J.
REGISTRATION NUMBER: 32,327
REFERENCE/DOCKET NUMBER: 203/
TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
COMPUTER: IBM compatible
OPERATING SYSTEM: IBM P.C. DOS (Version 5.0)
SOFTWARE: WordDerfect (Version 5.1)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/146,504
                                                                                         SEQUENCE CHARACTERISTICS:
LENGTH: 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQUENCES:
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CITY: Los Angeles
CITY: Tolifornia
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SELF-ADDRESSABLE SELF-ASSEMBLING
NICROELECTRONIC SYSTEMS AND DEVICES
MOLECULAR BIOLOGICAL ANALYSIS AND
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   0.7%;
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US-09-966-491A-55

US-09-957-313A-55

US-09-966-312-5

US-09-975-062A-55

US-09-975-07603-6

US-08-629-939-10

US-08-759-873-10

US-08-759-873-10

US-08-759-873-10

US-08-759-852A-2

US-08-271-882B-16

US-08-271-882B-16

US-09-234-237-1

US-09-016-520-23

US-09-016-520-23

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   DB 1; L
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               Length 20
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                                                                                                                                Sequence 16, Application US/08725976 Patent No. 5929208
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                                                                          GENERAL INFORMATION:

APPLICANT: Heller, Michael J.; and Tu, Eugene
TITLE OF INVENTION: METHODS FOR ELECTRONIC SYNTHESIS OF POLYMERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
NAME: Berridge, William P.
REGISTRATION NUMBER: 30,024
REFERENCE/DOCKET NUMBER: WPB 36
TELECOMMUNICATION INFORMATION:
TELEPHONE: 703-836-6400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION: APPLICANT: Cros,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELEFAX: 703-836-2787 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5" Floppy disk, 1.44M storage
COMPUTER: IBM CC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                               FEATURE: OTHER INFORMATION: consists of nucleosides with an alpha anomer and carries
NUMBER OF SEQUENCES: 31
CORRESPONDENCE ADDRESS:
ADDRESSEE: Lyon & Lyon
STREET: 633 West Fifth Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE CHARACTERISTICS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Kurfurst, Robin APPLICANT: Battail, Nicole
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 02-FEB-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/08/379,593
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          other nucleic acid
/desc = "SYNTHETIC DNA"
                                                                                                                                                                                                                                                                                                                                         0.7%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                           1.1e+02
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SEQUENCE CHARACTERISTICS:
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OPERATING SYSTEM: WINDOWS
SOFTWARE: WORDS
TURRENM
                                    CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                   APPLICANT: WATSON,
APPLICANT: TAN, PARTITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TELECOMMUNICATION INFORMATION:
TELEPHONE: (213) 489-1600
TELEFAX: (213) 955-0440
TELEFAX: 67-3510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
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MEDIUM TYPE: 3.5" Diskette, 1.44 Mb
                                                                                                                                                                    COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
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ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
                                                                               SOFTWARE: FastSEQ for Windows Version URRENT APPLICATION NATA;
APPLICATION NUMBER: US/08/997 000 PILING DATE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Los Angeles
STATE: California
                                                                                                                                  COMPUTER: IBM Con
OPERATING SYSTEM:
                                                                                                                                                                                                                                                          STREET:
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les 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Murphy, David B. REGISTRATION NUMBER: 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: OC
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY:
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                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                          ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ENGTH:
                                                                                                                                                                                                                                            ITY: Seattle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1799 АЛЛАЛАЛАЛАЛАЛАЛАЛА 1818
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                                                                                                                                                                                                                                                             2601 Elliott Avenue, Suite 4185
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                                                                                                                                                                       Diskette
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                                                                                                                                                                                                                                                                                                                                                   JAMES D.
                                                                                                                                                                                                                                                                                                        L L.J.
METHODS AND COMPOUNDS FOR THE TREATMENT OF IMMUNOLOGICALLY-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WINDOWS (VERSION 3.0)
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described below:
08/146,504
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1.1e+02;
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                             INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tent No.
                                                                                                                                                                                                         APPLICATION NUMBER: U.S. Patent Application No. FILING DATE: June 12, 1997
APPLICATION NUMBER: U.S. Patent Application No. FILING DATE: August 29, 1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                    COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/997,362
                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES:
CORRESPONDENCE ADDRESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Scott, Linda
APPLICANT: Prestidge, Ross
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF MYCOBACTERIAL INFECTIONS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
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                                                                                                                                  TELECOMMUNICATION INFORMATION: TELEPHONE: 206-269-0565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICANT:
                                                                                                                                                              NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET:
                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY: U
ZIP: 98121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: Seattle
TOPOLOGY: 11
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                           TYPE: nucleic acid
                                                                                                                  TELEFAX: 206-269-0563
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40. 5985287
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2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
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Visser, Elizabeth
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S: single
linear
                                                                                                                                                                                                                                                                                                                                                                                                                                  Diskette
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                                                                                                                                                                                                                                                                  .S. Patent Application No. 5985287 08/873,970
1997
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US-08-997-362-83
                                                                                                    US-08-965-780-1
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; Patent No. 5986084
; GENERAL INFORMATION:
APPLICANT: Pitsch, S
APPLICANT: Weiss, Pa
APPLICANT: Jenny, Lu
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-08-965-780-1/c
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Best Local 9
                                                  Matches
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                                                                                                                                                                                                   TELEFAX: 202-887-9093
                                                                                                                                                                                                                                                                                            CLASSIFICATION: 536
PRIOR APPLICATION DATA:
APPLICATION NUMBER: CH 01:
FILING DATE: 18-AUG-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                MOLECULE TYPE:
DESCRIPTION:
                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                               TELEPHONE: 202-887-9023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: KUBOVCIK & KUBOVCIK
                                                                                                                                        STRANDEDNESS: single TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET: 900 17cn
CITY: Washington
                                                                                                                                                                                                                                                         NAME: Kubovcik, Ronald J.
REGISTRATION NUMBER: 25,401
REFERENCE/DOCKET NUMBER: FREI-002
                                                              Local Similarity
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                      1799 AAAAAAAAAAAAAAAAAAA 1818
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20; Conserv
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                                                 Conservative
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                                                                                                            other nucleic acid
/desc = "oligoribonucleotide"
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                                                            100.0%;
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100.0%; Pred. No.
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                                                                            0.7%;
                                                                                                                                                                                                                                                                                                                         CH 01931/97
                                                0; Mismatches
                                                             Score 20; pred. No.
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                                                                         DB 2;
                                                             1.1e+02;
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                                                                         Length 20;
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RESULT 7
US-08-873-970-83
; Sequence 83, App.
; Patent No. 60013

GENERAL INFORMATION:

Application US/08873970 001361

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Seque....
PACENT NO. 615UUJL
GENERAL INFORMATION:
APPLICANT: UCHIDA, K.,
APPLICANT: UCHIDA, T.,
APPLICANT: TANAKA, Y.,
APPLICANT: MATSUDA, Y.,
ENDRE CONTONE KONDO, S.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/705,347
PILING DATE: 29-AUG-1996
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Visser, Elizabeth
APPLICANT: Skinner, Margot
APPLICANT: Scott, Linda
APPLICANT: Prestidge, Ross
TITLE OF INVENTION: COMPOUNDS AND METHODS FOR
TITLE OF INVENTION: TREATMENT AND DIAGNOSIS OF MYCOBACTERIAL INFECTIONS
NUMBER OF SEQUENCES: 106
                                                                 NUMBER OF SEQUENCES: 185
CORRESPONDENCE ADDRESS:
ADDRESSEE: MORGAN & FINNEGAN, L.L.P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 111
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-269-0565
                                                                                                                         TITLE OF INVENTION: AN ANTISENSE NUCLEIC ACID TITLE OF INVENTION: COMPOUND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: linear MOLECULE TYPE: Other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM: MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CORRESPONDENCE ADDRESS:
ADDRESSEE: Law Offices of Ann W. Speckman
STREET: 2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
STRANDEDNESS: single
COUNTRY:
                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                         1799 АДАДАДАДАДАДАДАДАДАДА 1818
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                                T: 345 PARK AVENUE
NEW YORK
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               NEW YORK
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Visser, Elizabeth
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100.0%; Pred. No. 1.1e+
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hes 0;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE/DOCKET NUMBER: 1452
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 754-880
TELEPAX: (212) 751-6849
INFORMATION FOR SEQ ID NO: 96:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patent No. 6160093
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 83,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
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Best Local Similarity
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: FOCOS/MS-DOS
PC-DOS/MS-DOS
PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                       APPLICANT: Tan, Paul
APPLICANT: Visser, Elizabeth
APPLICANT: Visser, Margot
APPLICANT: Skinner, Margot
APPLICANT: Prestidge, Ross
TITLE OF INVENTION: Compounds and Methods for
TITLE OF INVENTION: Treatment and Diagnosis of Mycobacterial Infections
NUMBER OF SEQUENCES: 208
                                                                                                                                                               ZIP: 98121
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskett
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MOLECULE TYPE: other nucleic acid DESCRIPTION: /desc = "synthetic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: JP 145146/94
FILING DATE: 27-JUN-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: JP 311130/94
FILING DATE: 21-NOV-1994
ATTORNEY/AGENT INFORMATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 08/705,347
FILING DATE: 29-AUG-1996
                                                                                                  COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                        STREET: 2601 E
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: SERUNIAN, LESLIE REGISTRATION NUMBER: 3
                                                   CLASSIFICATION:
                                                                                                                                                                                                                          COUNTRY:
                                                                                                                                                                                                                                                                          ADDRESSEE: Law Offices of Ann W. Speckman
STREET: 2601 Elliott Avenue, Suite 4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ENGTH:
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Pred. No. 1.1e+(
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APPLICATION NUMBER:

08/873,970

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RESULT 11
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                                                                              US-09-280-805-266
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                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: P
SEQ ID NO 1
LENGTH: 20
                                              Sequence 266, Application US/09280805
Patent No. 6184212
                                                                                                                                                                                                          Matches
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                                                                                                                                                                                                                        Query Match
Best Local S
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APPLICANT: Bruice, Thomas C.
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                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 1
NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/111,800 PRIOR FILING DATE: 1998-12-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/091,481
PRIOR FILING DATE: 1998-07-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 09/347,443
PRIOR FILING DATE: 1999-07-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/407,675
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SEQUENCE CHARACTERISTICS:
LENGTH: 20 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE:
                                                                                                                                                                                                                                                                                                                       ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 08/997,362
FILING DATE: 23-DEC-1997
ATTORNEY/AGENT INFORMATION:
NAME: Sleath, Janet
REGISTRATION NUMBER: 37,007
REFERENCE/DOCKET NUMBER: 11000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     THE OF INVENTION: DECXYNUCLEIC ALKYL THIOUREA COMPOUNDS AND USES THEREOF
APPLICANT:
                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULE TYPE: Other
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STRANDEDNESS: single
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                                                                                                                                                                           1799 AAAAAAAAAAAAAAAAAA 1818
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                               INFORMATION:
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20; Conserv
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Graham, Brett P.
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                                                                                                                                                                                                            Conservative
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             Loren J. Miraglia, Pamela Nero, Mark J.
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100.0%; Pred. No. 1.
1ve 0; Mismatches
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Pred. No.
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US-09-280-805-267
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                                                                                                                                                                                                           APPLICANT: LOYEL

APPLICANT: Graham, Brett P. MODIA

TITLE OF INVENTION: ANTISENSE MODULATION OF HUMAN

TITLE OF INVENTION: EXPRESSION

NUMBER OF SEQUENCES: 271

CORRESPONDENCE ADDRESS:

ADDRESSE: Law Offices of Jane Massey Licata

ADDRESSE: Law Offices treet
                                                                                                                                                                                                                                                                                                                                                                       Patent No. 6184212
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 267, Application US/09280805 Patent No. 6184212
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Best Local Similarity
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             REGISTRATION NUMBER: 32,257
REFERENCE/DOCKET NUMBER: IS:
TELECOMMUNICATION INFORMATION:
                                               COMPUTER: IBM PC
OPERATING SYSTEM: WINDOWS 95
SOFTWARE: WORDPERFECT 6.0
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/048,810
FILING DATE: March 26, 1998
ATTORNEY/ACENT INFORMATION:
NAME: Licata, Jane Massey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OPERATING SYSTEM: WINDOWS 95
SOFTWARE: WORDPERFECT 6.0
CURRENT APPLICATION DATA:
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MEDIUM TYPE: DISKETT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION:
APPLICATION NUMBER: UPPILING DATE: herewith CLASSIFICATION:
                                                                                                                                                                                                 STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: FILING DATE: herewicLASSIFICATION:
                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: Nucleic Acid
STRANDEDNESS: Single
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REGISTRATION NUMBER: 32,2
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66 East Main Street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20 base pairs
                                                                                                                                                                             U.S.A.
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Loren J. Miraglia, Pama
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                         DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               herewith
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                         ANTISENSE MODULATION OF HUMAN MDM2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EXPRESSION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09/280,805
                                   US/09/280,805
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 20; DB 3;
Pred. No. 1.1e+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ISPH-0346
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 20;
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RESULT 13
US-09-250-075-1/c
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US-09-173-936B-14/c
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; ANTI-SENSE:
US-09-280-805-267
                                                                                                                                                                                                                                                                                                                                                                      US-09-250-075-1
                                                                                      Sequence 14, Application US/09173936B Patent No. 6238865 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE OF INVENTION: Compounds Processes And Intermediates For Synthesis Of TITLE OF INVENTION: Mixed Backbone Oligomeric Compounds

FILE REFERENCE: ISIS3299

CURRENT APPLICATION NUMBER: US/09/250,075

CURRENT FILING DATE: 1999-02-12

NUMBER OF SEQ ID NOS: 12

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 1

DENOTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Manoharan, Muthiah APPLICANT: Maier, Martin A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: 609-810-1454 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: (1)..(19)
OTHER INFORMATION: 2'-methoxyethoxy (MOE)
OTHER INFORMATION: Description of Artificial Sequence:
OTHER INFORMATION: Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA CRGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: March 26, 1
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER: 05
FILING DATE: March 26,
                                                                                                                                                                                                                                                                                          Local Similarity les 20; Conserv
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nes 20; Conservative (
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STRANDEDNESS: Sing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Licata, Jane Massey
REGISTRATION NUMBER: 32,257
REFERENCE/DOCKET NUMBER: ISPH-0346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TELEPHONE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1851 CCTGTAATCCCAGCACTTTG 1870
                            APPLICANT: Zhen, Huang; Szostak, Jack W.
TITLE OF INVENTION: A Simple and Efficient Method to Label and Modify 3'-
Terminal
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100.0%; F1
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100.0%; Pred. No. 1.1e+02;
ive 0; Mismatches 0;
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Nucleotides
               RNA Using DNA Polymerase and a Synthetic Template with
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US-09-454-704A-13
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US-09-454-704A-13
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                                                                                                                                                                                                    NUMBER: Fat
SOFTWARE: Fat
; SEQ ID NO 13
FRUGTH: 20
                                                                                                                                                                                                                                                                                                                                   Sequence 13, Application US/09454704A
PATENT NO. 6274321
GENERAL INFORMATION:
APPLICANT: Blumberg, Bruce
TITLE OF INVENTION: High Throughput Functional Screening of
TITLE OF INVENTION: CDNAs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best Local Similarity
Matches 20; Conserv
                                   Best Local Similarity Matches 20; Conserv
                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                            FILE REFERENCE: P-UC 3662
CURRENT APPLICATION NUMBER: US/09/454,704A
CURRENT FILING DATE: 1999-12-03
NUMBER OF SEQ ID NOS: 14
                                                                                                                                                                                      LENGTH: 20
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/063,757
FILING DATE: 17-OCT-1997
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
                                                                                                                                 OTHER INFORMATION: CDNA
                                                                                                                                                 ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
ZIP: 10176
COMPUTER READABLE FORM:
MEDIUM TYPE: 3.50 inch Diskette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM_MS
OPERATING SYSTEM: Window 95
SOFTWARE: Microsoft Word
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES: 21
CORRESPONDENCE ADDRESS: 25
ADDRESSEE: Cohen, Pontani, Lieberman & Pavane
STREET: 551 Fifth Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TOPOLOGY: linear MOLECULE TYPE: DNA
1799 AAAAAAAAAAAAAAAAAA 1818
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FILING DATE: 16-Oct-1998
CLASSIFICATION: 435
                                                                                                                                                                                                                                             FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CITY: New York
STATE: New York
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH: 20 bases
                                   Conservative
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; Pred. No. 1.1e+02;
                                     Mismatches
                                                      1.1e+02;
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Perfect score:
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Gapop 60.0 , Gapext 60.0
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Copyright (c) 1993 - 2004 Compugen Ltd.
/ Cgm2_6/ptodata/1/pubpna/US09_BUBCOMB.seq:*
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/ Cgm2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
/ Cgm2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq:*
/ Cgm2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
/ Cgm2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
/ Cgm2_6/ptodata/1/pubpna/US10_NEW_PUB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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Result	Score	Query	Length	B	ID	Description
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	20	0.7	20	9	US-09-973-788A-55	
		0.7	20	9	US-09-973-638A-55	
_		0.7	20	9	US-09-974-007-55	
		0.7	20	9	US-09-976-617A-55	
_	8 20	0.7	20	9	US-09-961-949A-55	
		0.7	20	9	US-09-760-500A-55	
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		0.7	20	9	US-09-975-062A-55	
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13		0.7	20	ø	US-09-976-577-55	
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4 US-10-112-653-	4 US-10-117-267-	4 US-10-176-055-1	3 US-10-051-643-8	3 US-10-208-357-2	0 US-09-976-968A-5	0 US-09-975-059A-5	0 US-09-976-601A-5	0 US-09-776-479-	0 US-09-776-479-55	0 US-09-776-479-22	-09-881-535-	0 US-09-976-863A-	0 US-09-997-672-4	0 US-09-912-	0 US-09-957-313A-5	0 US-09-975-376A-5	0 US-09-974-500A-	0 US-09-957-318A-5	0 US-09-981-344-55	0 US-09-888-326-8	0 US-09-888-326-83	0 US-09-888-326-2	0 US-09-820-279B	0 US-09-880-505-8	US-09-853-75	US-09-976-971A-5	US-09-966-491A-	US-09-927-777A-7	US-09-927-777A-
21	1	equence 11	83	equence 26	e 55	equence 55	equence 55	е 56	e 55	22	Appl	9 55, App	e 40, App	e 16,	e 55, App	equence 55, App	quence 55, App	e 55, App	quence 55, App	quence 839, Ap	equence 838	equence 2,	e 55	e 83	4, 1	55,	55,	Sequence 70, Appl	55

## ALIGNMENTS

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RESULT 1
US-09-752-983-266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 266, Application US/09752983
Patent No. US20010016575A1
GENERAL INFORMATION:
APPLICANT: Loren J. Miraglia, Pamela Nero, Mark J.
APPLICANT: Graham, Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF HUMAN MDM2
TITLE OF INVENTION: EXPRESSION
                                                          CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/280,805

FILING DATE: -UNKNOWN-
ATTORNEY/AGENT INFORMATION:

NAME: Licata, Jane Massey
REGISTRATION NUMBER: 32,257

REFERENCE/DOCKET NUMBER: 15PH-0346

TELEPHONE: 609-810-1515
                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCI
COMPUTER: IBM PC
OPERATING SYSTEM: WINDOWS 95
SOFTWARE: WORDPERFECT 6.0
CURRENT APPLICATION DATA:
TELEFAX: 609-810-1454
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE: N
                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US/09/752,983 FILING DATE: 02-Jan-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CITY: Marlton
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Law Offices of Jane Massey Licata
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RESULT 3
US-09-733-294A-82/c
; Sequence 82, Application US/09733294A
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US-09-752-983-267
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Best Local Simi
Matches 20;
                                                                                                                                                  Matches
                                                                                                                                                            Query Match
Best Local Similarity
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GENERAL INFORMATION:
APPLICANT: Loren J. Miraglia, Pamela Nero, Mark J.
APPLICANT: Graham, Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF HUMAN MDM2
TITLE OF INVENTION: EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
                                                                                                                                                                                                                                                                                                REGISTRATION NUMBER: 32,257
REFERENCE/DOCKET NUMBER: ISPH-0346
TELECOMMUNICATION INFORMATION:
TELEPHONE: 609-810-1515
TELEPAX: 609-810-1454
INFORMATION FOR SEQ ID NO: 267:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 09/2 FILING DATE: <Unknown>ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION DATA:
APPLICATION NUMBER: US,
FILING DATE: 02-Jan-200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: Law Offices of Jane Massey Licata
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY: Linear ANTI-SENSE: Yes
                                                                                                                                                                                                                          TOPOLOGY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                                                                                                                                                                                                                                                    LENGTH: 20 base pairs TYPE: Nucleic Acid STRANDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: IBM PC
OPERATING SYSTEM: WINDOWS 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 20 base pairs
TYPE: Nucleic Acid
STRANDEDNESS: Single
                                                                                                                                                                                                                                                                                                                                                                                                    NAME: Licata, Jane Massey REGISTRATION NUMBER: 32,2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
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                                                                                                             1851 CCTGTAATCCCAGCACTTTG 1870
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                                                                                   CCTGTAATCCCAGCACTTTG 20
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                                                                                                                                          0.7%; Score 20; llarity 100.0%; Pred. No. Conservative 0; Mismatc
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APPLICANT: Brett P. Monia
APPLICANT: William Gaarde
APPLICANT: Susan M. Freier
APPLICANT: Susan M. Freier
APPLICANT: Edward V. Wancewicz
TITLE OF INVENTION: ANTISENSE MODULATION OF TERT EXPRESSION
FILE REFERENCE: ISPH-0527
CURRENT APPLICATION NUMBER: US/09/733,294A
CURRENT APPLICATION NUMBER: 09/572,423
PRIOR APPLICATION NUMBER: 09/572,423
PRIOR FILING DATE: 2000-05-16
SEQ ID NO 62
TENUMBER OF SEQ ID NOS: 108
; OTHER INFORMATION: Description of Artificial Sequence:random; OTHER INFORMATION: synthetic sequence US-09-973-788A-55
                                                                                                                                                                                                                                                       FILE REFERENCE: 00-713-i10

CURRENT APPLICATION NUMBER: US/09/973,788A

CURRENT FILING DATE: 2002-03-05

PRIOR APPLICATION NUMBER: 09/603,830

PRIOR PILING DATE: 2000-06-26

PRIOR PPLICATION NUMBER: 09/344,667

PRIOR PILING DATE: 1999-06-25

PRIOR APPLICATION NUMBER: 09/240,755

PRIOR PILING DATE: 1999-01-29

PRIOR APPLICATION NUMBER: CT/US97/12783

PRIOR APPLICATION NUMBER: 60/031,809

PRIOR APPLICATION NUMBER: 60/031,809

PRIOR APPLICATION NUMBER: 60/200,161

PRIOR APPLICATION NUMBER: 60/200,161
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                                                                                                                                                               SOFTWARE: Microsoft Word 2000
SEQ ID NO 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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Best Local Similarity
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                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 64
                                                                                                                                                                                                                                     PRIOR FILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Elghanian, Robert
APPLICANT: Taton, Thomas A.
TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLECTIDES ATTACHED THERETO
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Mucic, APPLICANT: Storho
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                                                                      TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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ORGANISM: Artificial Sequence
                                                                                                                                             LENGTH: 20
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5. US20020127574A1
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Storhoff, James J.
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100.0%; Pred. No.
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Query Match
Best Local Similarity
Matches 20; Conserv

0.7%; Score 20; DB ilarity 100.0%; Pred. No. 55 Conservative 0; Mismatches

DB 9;

Length 20;

Indels

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US-09-973-638A-55
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Sequence 55, Appr
No. US2002
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Best Local Similarity
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APPLICANT:
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                                                          TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO TITLE OF INVENTION: AND USES THEREFOR FILE REFERENCE: 00.713-18 CURRENT APPLICATION NUMBER: US/09/974,007 CURRENT FILING DATE: 2002-03-12 CURRENT FILING DATE: 2002-03-12 CURRENT FILING DATE: 2002-03-12
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CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 09/344,667
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PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
NUMBER OF SEQ ID NOS: 64
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PRIOR APPLICATION NUMBER: 09/240,755
PRIOR FILING DATE: 1999-01-29
PRIOR APPLICATION NUMBER: PCT/US97/12
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ORGANISM: Artificial Sequence
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FILING DATE: 1997-07-21
APPLICATION NUMBER: 60/031,809
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Storhoff, James J.
Elghanian, Robert
Taton, Thomas A.
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Mucic, Robert C.
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100.0%; Pred. No.
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PRIOR APPLICATION NUMBER: PCT/US97/12783
PRIOR FILING DATE: 1997-07-21
PRIOR PRILING DATE: 1996-07-07-29
PRIOR FILING DATE: 1996-07-29
PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
PRIOR FILING DATE: 2000-04-26
NUMBER: OF SEQ ID NOS: 64
                                                                                                                                                                                                  SEQ ID NO 55
LENGTH: 20
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SEQ ID NO 55
LENGTH: 20
      Matches
                    Query Match
Best Local Similarity
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                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 64
SOFTWARE: Microsoft Word 2000
                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 09/240,755
PRIOR FILING DATE: 1999-01-29
PRIOR APPLICATION NUMBER: PCT/US97/12783
PRIOR FILING DATE: 1997-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 09/603,830 PRIOR FILING DATE: 2000-06-26
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                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/200,161
                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 09/344,667 PRIOR FILING DATE: 1999-06-25
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OTHER INFORMATION: Description of Artificial Sequence:random
OTHER INFORMATION: synthetic sequence
                                                                                                OTHER INFORMATION: Description of Artificial Sequence:random OTHER INFORMATION: synthetic sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                        FEATURE:
                                                                                                                                                        ORGANISM: Artificial Sequence
                                                                                                                                                                              TYPE: DNA
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FILING DATE: 1996-07-29
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    Conservative
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                    0.7%; Score 20;
100.0%; Pred. No.
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L00.0%; Pred. No.
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                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                               Sequence 55, Application US/09760500A Patent No. US20020155442A1
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                                                                                                                                                      APPLICANT: Taton, Thomas A.
TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLECTIDES ATTACHED THERETO
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: 00-715-A
                                                                                                                                                                                                                                                                                    APPLICANT: Mirkin, Chad A
APPLICANT: Letsinger, Rob
APPLICANT: Mucic, Robert
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                                                                  CURRENT APPLICATION NUMBER: US/09/760,500A
CURRENT FILING DATE: 2002-03-05
PRIOR APPLICATION UNUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
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PRIOR FILING DATE: 1999-01-29
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                                             PRIOR APPLICATION NUMBER: 09/344,667
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G DATE: 1999-06-25.
CATION NUMBER: 09/240,755
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Elghanian, Robert
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Elghanian, Robert
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100.0%; Pred. No.
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US-09-760-500A-55
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                                                                                                                                               ; OTHER INFORMATION: Description of Artificial Sequence:random; OTHER INFORMATION: synthetic sequence
US-09-967-409A-55
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PRIOR FILING DATE: 2000-04-26
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Microsoft Word 2000
SEQ ID NO 55
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SEQ ID NO 55
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                                                                       Matches
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Best Local
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APPLICANT: Letsin;
APPLICANT: Mucic,
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PRIOR FILING DATE: 1997-07-21
                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 09/344,667
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 09/240,755
PRIOR FILING DATE: 1999-01-29
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PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
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PRIOR FILING DATE: 2000-06-26
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Mucic, Robert C.
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RESULT 11 US-09-975-062A-55

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SEQ ID NO 55
LENGTH: 20
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Best Local :
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                                                                PRIOR APPLICATION NUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 09/344,667
PRIOR FILING DATE: 1999-06-25
PRIOR FILING DATE: 1999-06-25
                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/976,378A CURRENT FILING DATE: 2002-03-05
                                                                                                                                                                                                     TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO TITLE OF INVENTION: AND USES THEREFOR FILE REFERENCE: 00-713-125
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PRIOR APPLICATION NUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
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PRIOR FILING DATE: 1999-06-25
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                       APPLICATION NUMBER: 09/240,755
FILING DATE: 1999-01-29
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FILING DATE: 1999-01-29
APPLICATION NUMBER: PCT/US97/12783
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Mucic, Robert C.
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Storhoff, James J.
Elghanian, Robert
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PRIOR FILING DATE: 1996-07-29
FRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
NUMBER OF SEQ ID NOS: 64
SOFTWARE: Microsoft Word 2000
SEQ ID NO 55
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                                                                                                                                        US-09-976-577-55
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                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 64
SOFTWARE: Microsoft Word 2000
SEQ ID NO 55
                                                                  Matches
                                                                                  Query Match
Best Local &
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Sequence 55, Ap
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 09/603,830
PRIOR FILING DATE: 2000-06-26
PRIOR APPLICATION NUMBER: 09/344,667
PRIOR FILING DATE: 1999-06-25
                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/09/976,577
CURRENT FILING DATE: 2002-03-05
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Mirkin, APPLICANT: Letsing
                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 09/240,755
PRIOR FILING DATE: 1999-01-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE:
                                                                                                                                                                                                 TYPE: DNA ORGANISM: Artificial Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO 
IITLE OF INVENTION: AND USES THEREFOR 
FILE REFERENCE: 00-713-120
                                                                                                                                                   OTHER INFORMATION: Description of Artificial Sequence:random OTHER INFORMATION: synthetic sequence
                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
OTHER INFORMATION: Description of Artificial Sequence:random
OTHER INFORMATION: synthetic sequence
                                                                                                                                                                                                                                             ENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: 60/031,809
                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: PCT/US97/12783 FILING DATE: 1997-07-21
                           1799 AAAAAAAAAAAAAAAAAA 1818
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                                                                                    Similarity
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Taton, Thomas A.
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                                                              0.7%; Score 20; larity 100.0%; Pred. No. Conservative 0; Mismatc
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Pred. No.
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PRIOR APPLICATION NUMBER: 2001-07-199/01846
PRIOR FILING DATE: 1999-07-27
PRIOR APPLICATION NUMBER: PCT/FR99/01846
PRIOR APPLICATION NUMBER: FR 98/10084
PRIOR FILING DATE: 1998-07-31
NUMBER OF SEQ ID NOS: 5
SOFTWARE: Patentin version 3.0
SEQ ID NO 5
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Patent No. US20020155496A1
                                                                                 SOFTWARE: Microsoft Word 2000
SEQ ID NO 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 55, Application U Patent No. US20020164605A1 GENERAL INFORMATION:
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PRIOR APPLICATION NUMBER: 09/603,830
PRIOR APPLICATION NUMBER: 09/344,667
PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: 09/344,667
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                                                                                                                                                PRIOR APPLICATION NUMBER: 60/031,809
PRIOR FILLING DATE: 1996-07-29
PRIOR APPLICATION NUMBER: 60/200,161
PRIOR FILING DATE: 2000-04-26
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CURRENT APPLICATION NUMBER: US/09/771,554
CURRENT FILING DATE: 2001-01-31
CURRENT FILING DATE: 2001-01-31
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APPLICANT: DELAIR, Thierry
APPLICANT: MANDRAND, Berrard
TITLE OF INVENTION: SATURATED AND UNSATURATED ABIETANE DERIVATIVES, DERIVED CONJUGATE
TITLE OF INVENTION: USES IN A DIAGNOSTIC COMPOSITION, A REAGENT AND A DEVICE
FILE REFERENCE: 108473
                                                                                                                              NUMBER OF SEQ ID NOS: 64
                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/966,312
CURRENT FILING DATE: 2002-05-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO TITLE OF INVENTION: AND USES THEREFOR FILE REFERENCE: 00-713-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
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APPLICANT: Letsinger, Rob
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TYPE: DNA
ORGANISM: Artificial Sequence
TYPE: DNA
ORGANISM: Artificial Sequence
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                                                               ENGTH: 20
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                                                                                                                                                                                                                                   APPLICATION NUMBER: PCT/US97/12783
FILING DATE: 1997-07-21
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FILING DATE: 1999-01-29
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Mucic, Robert C.
Storhoff, James J.
Elghanian, Robert
Taton, Thomas A.
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; OTHER INFORMATION: Description of Artificial Sequence:random; OTHER INFORMATION: synthetic sequence
US-09-966-312-55

Query Match
Best Local Similarity 100.0%; Pred. No. 55;
Matches 20; Conservative 0; Mismatches 0; Indels 0; Gaps
Qy 1799 AAAAAAAAAAAAAAAAAA 1818
Qy 1799 AAAAAAAAAAAAAAAAA 20
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Search completed: March 7, 2004, 23:00:09
Job time : 964 secs

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Post-processing: Listing first 45 summaries
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Copyright (c) 1993 - 2004 Compugen Ltd.
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gn2 6/ptcdata/2/pna/US06 COMB.seq:*
gn2 6/ptcdata/2/pna/US06 COMB.seq:*
gn2 6/ptcdata/2/pna/US08 COMB.seq:*
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gn2 6/ptcdata/2/pna/US085 COMB.seq:*
gn2 6/ptcdata/2/pna/US085 COMB.seq:*
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44 / cgm2 6 / ptcdate/ / pma/US100B COMB seq; *
46 / cgm2 6 / ptcdate/ / pma/US101B COMB seq; *
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69 / cgm2 6 / ptcdate/ / pma/US10B COMB seq; *
69 / cgm2 6 / ptcdate/ / pma/US1
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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PCT-US00-07938-10

Sequence 10, Application PC/TUS0007938

GENERAL INFORMATION:
APPLICANT: Genetics Institute, Inc.
TITLE OF INVENTION: MICHOSATELLITE REPEATS IN THE COSTIMULATORY RECEPTOR LOCUS AND
TITLE OF INVENTION: THEREOF
FILE REFERENCE: GNN-5343CPPC
CURRENT APPLICATION NUMBER: PCT/US00/07938
CURRENT FILING DATE: 2000-03-24
PRIOR APPLICATION NUMBER: 60/126,215
PRIOR APPLICATION NUMBER: 60/126,215
PRIOR APPLICATION NUMBER: 60/126,215
PRIOR APPLICATION NUMBER: 60/126,215
PRIOR TILING DATE: 1999-03-25
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    NUMBER OF SEQ ID NOS: 56
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 10
LENGTH: 20
TYPE: DNA
CORGANISM: Artificial Sequence
FEATURE:
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PCT-US02-38281-266
PCT-US02-38281-267
PCT-US02-39200-36
PCT-US02-14100A-31
PCT-US03-14100B-31
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PCT-US01-44737-36
PCT-US02-10873A-574
PCT-US02-18229-5
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PCT-US03-30374-1
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PCT-US02-33002-2
PCT-US02-33699-1
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PCT-US03-19360-88
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$03-19360-223
$03-26491-516
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62, Appl

70, Appl

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574, Appl

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11, Ap
                                             APPLICANT: Isis Pharmaceuticals, Inc.
APPLICANT: Brett P. Monia
APPLICANT: Robert McKay
APPLICANT: Modelt McKay
APPLICANT: Madeline M. Butler
APPLICANT: Madeline M. Butler
APPLICANT: Jacqueline Myatt
TITLE OF INVENTION: ANTISENSE MODULATION OF GLYCOGEN SYNTHASE KINASE 3 AI
TITLE OF INVENTION: EXPRESSION
FILE REFERENCE: RTSP-0096
CURRENT APPLICATION NUMBER: PCT/US01/01411A
CURRENT APPLICATION NUMBER: 09/488,856
PRIOR APPLICATION NUMBER: 09/488,856
PRIOR APPLICATION NUMBER: 09/488,856
PRIOR APPLICATION SUMBER: 09/488,856
PRIOR APPLICATION NUMBER: 09/488,856
PRIOR APPLICATION SUMBER: 09/488,856
PRIOR APPLICATION NUMBER: 09/488,856
PRIOR APPLICATION SUMBER: 09/488,856
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PCT-US01-01411A-62/c
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Best Local Similarity 100.0%;
Conservative
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Matches 20; Conserv
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TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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TYPE: DNA
ORGANISM: Artificial Sequence
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%; Pred. No. 6.9
0; Mismatches
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ALPHA

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MIRKIN, Chad A.

APPLICANT: Letsinger, Robert L.

APPLICANT: Storboff, James J.

APPLICANT: Elghanian, Robert

APPLICANT: Taton, Thomas A.

ITILB OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO

TITLE OF INVENTION: NANOPARTICLES HAVING OLIGONUCLEOTIDES ATTACHED THERETO

FILE REFERENCE: 443-1-1-1-PCT

CURRENT APPLICATION NUMBER: PCT/US00/17507

CURRENT FILING DATE: 2000-06-26

FRIOR APPLICATION NUMBER: 09/344,667

FRIOR FILING DATE: 1999-06-25

FRIOR FILING DATE: 2000-04-26

NUMBER OF SEQ ID NOS: 62

SOFTWARE: Patentin Ver. 2

SEQ ID NO 53

LENGTH: 20

TYPE: No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Description of Artificial Sequence: primer PCT-US00-07938-10
                                                                             OTHER INFORMATION: Description of Artificial Sequence:random OTHER INFORMATION: synthetic sequence
               DB 1; Le
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6.9e+06;
                              Length 20;
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; OTHER INFORMATION: Antisense Oligonucleotide
PCT-US01-30871-70
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                                                Query Match
Best Local 9
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                                     Matches
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CURRENT FILING DATE: 2001-10-03
PRIOR APPLICATION NUMBER: 09/679,299
PRIOR FILING DATE: 2000-10-04
NUMBER OF SEQ ID NOS: 164
                                                                                                                                                                                                                                                                                                             APPLICANT: Andrew T. Watt
TITLE OF INVENTION: ANTISENSE MODULATION OF CASPASE 6 EXPRESSION
FILE REFERENCE: RTSP-0192
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APPLICANT: Brett P. Monia
APPLICANT: William Gaarde
APPLICANT: Susan M. Freier
APPLICANT: Edward V. Wancewicz
TITLE OF INVENTION: ANTISENSE MODULATION OF
                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Isis Pharmaceuticals, Inc
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PRIOR APPLICATION NUMBER: 09/572,423
PRIOR FILING DATE: 2000-05-16
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CURRENT FILING DATE: 2001-05-15
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                                                                                                                                                                        TYPE: DNA
                                                                                                                                                     ORGANISM: Artificial Sequence
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Matches
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SEQ ID NO 36
LENGTH: 20
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SEQ ID NO 23
LENGTH: 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Polynucleotides Useful for Modulating Transcription FILE REFERENCE: 023070-1147109C CURRENT APPLICATION NUMBER: PCT/US01/44737 CURRENT FILING DATE: 2002-08-28 PRIOR APPLICATION NUMBER: US 09/724,857 PRIOR FILING DATE: 2000-11-28 PRIOR FILING DATE: 2000-11-28 PRIOR FILING DATE: 2000-11-28 PRIOR FILING DATE: 2000-11-28 PRIOR APPLICATION NUMBER: US 09/253,672 PRIOR APPLICATION NUMBER: US 09/253,672 PRIOR APPLICATION NUMBER: US 09/253,672 PRIOR APPLICATION SUMMER: US 09/253,672 PRIOR PILING DATE: 2000-11-28 PRIOR FILING DATE: 2000-11-28 PRIOR PILING DATE
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APPLICANT: Apuya, Nestor I
APPLICANT: Tatarinova, Tai
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PRIOR APPLICATION NUMBER: US 09/688,566
PRIOR FILING DATE: 2000-10-16
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                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA ORGANISM: Artificial Sequence FEATURE:
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Goldberg, Robert B.
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                                                                                                                                       Conservative
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RESULT 8 PCT-US02-10873A-574

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SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 5
LENGTH: 20
TYPE: The control of the control of
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Best Local
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LENGTH: 20
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TITLE OF INVENTION: Nucleic Acid Amplification Utilizing Intermediate
TITLE OF INVENTION: Duplexes
FILE REFERENCE: 018048-001711PC
CURRENT APPLICATION NUMBER: PCT/US02/16229
CURRENT FILING DATE: 2002-01-07
DEFINE APPLICATION NUMBER: PCT/US02/16229
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PRIOR FILING DATE: 2001-04-04
NUMBER OF SEQ ID NOS: 859
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CURRENT FILING DATE: 2002-12-23
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PRIOR FILING DATE: 2001-06-07
PRIOR APPLICATION NUMBER: US 10/077,383
PRIOR FILING DATE: 2002-02-15
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TITLE OF INVENTION: Genes Expressed in Intestinal Epithelium and Peyer's Patch M Celi
FILE REFERENCE: 216019-109
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OTHER INFORMATION: a at positions 13-20 may be present or
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OTHER INFORMATION: homopolymer spacer sequence
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les 20; Conserv
                                                                  1799 АДАДАДАДАДАДАДАДАДА 1818
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Evans, Claire F.
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PCT-US02-18229-6/c
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SEQ ID NO 2
                                                                            Query Match
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APPLICANT: U'Ren, Jack
APPLICANT: U'Ren, Jack
APPLICANT: Saigene Corporation
TITLE OF INVENTION: Nucleic Acid Amplification Utilizing Intermediate
FITLE OF INVENTION: Duplexes
FILE REFERENCE: 018048-001711C2
CURRENT APPLICATION NUMBER: PCT/US02/18229
CURRENT FILING DATE: 2002-01-07
PRIOR APPLICATION NUMBER: US 60/296,812
PRIOR PILING DATE: 2001-06-07
PRIOR APPLICATION NUMBER: US 10/077,383
PRIOR FILING DATE: 2002-02-15
PRIOR FILING DATE: 2002-02-15
                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 2605-1-002PCT
CURRENT APPLICATION NUMBER: PCT/US02/33002
CURRENT FILING DATE: 2002-10-16
PRIOR APPLICATION NUMBER: US 10/036,860
PRIOR FILING DATE: 2001-10-19
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NUMBER OF SEQ ID NOS: 35
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APPLICANT: Chen, Hang
APPLICANT: Toemel, Emily
                                                                                                                                                                             ORGANISM: Artificial Sequence
                                                                                                                                                                                                      TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: Description of Artificial Sequence: (T)-12-20 OTHER INFORMATION: homopolymer spacer sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Artificial Sequence FEATURE:
                                                                                                                                       OTHER INFORMATION: synthetic sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ITLE OF INVENTION: Methods for Nucleic Acid Amplification
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1799 ARABARARARARARARA 1818
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                                                           Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application PC/TUS0233002
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Ellis, Michael
                                        Conservative
                                                           100.0%;
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Pred. No.
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                                        Mismatches
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                                   6.9e+06;
thes 0;
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                                   Gaps
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PCT-USU2-----
; Sequence 266, Appri--
; GENERAL INFORMATION:
; APPLICANT: Loren J. Miraglia
; APPLICANT: Pamela S. Nero

TOTANT: Pamela S. Graham
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                                                                                           PCT-US02-38281-266
                                                                                                                   RESULT 14
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PCT-US02-35719-13
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                                                                                                                                                                                                                                         Matches
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SEQ ID NO 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 13, Applica GENERAL INFORMATION:
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Best Local
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TITLE OF INVENTION: NUCLEIC ACID PROBES AND METHODS TO DETECT AND/OR QUANTIFY NUCLEIC
TITLE OF INVENTION: ACID ANALYTES
FILE REFERENCE: PRO.07/PCT
CURRENT APPLICATION NUMBER: PCT/US02/33699
CURRENT FILING DATE: 2002-10-21
PRIOR APPLICATION NUMBER: 60/336,432
PRIOR APPLICATION NUMBER: 60/336,432
PRIOR FILING DATE: 2001-10-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wood, Linda
APPLICANT: Wagner, Susanne
APPLICANT: Parodi, Luis
TITLE OF INVENTION: Single Nucleotide Polymorphisms in GH-1
FILE REFERENCE: 00791.USL
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: PCT/US02/35719
CURRENT FILING DATE: 2002-11-07
NUMBER OF SEQ ID NOS: 51
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature LOCATION: (1)..(20)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                ORGANISM: artificial sequence
                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
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0; Mismatches
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hes 0;
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APPLICANT: Isis Pharmaceuticals, Inc.
TITLE OF INVENTION: Antisense Modulation of Human mdm2 Expression
FILE REFERENCE: ISPH-0717
CURRENT APPLICATION NUMBER: PCT/US02/38281
CURRENT FILING DATE: 2002-12-02
PRIOR APPLICATION NUMBER: US 10/005,344
PRIOR APPLICATION NUMBER: US 09/752,983
PRIOR FILING DATE: 2001-01-02
PRIOR FILING DATE: 2001-01-02
PRIOR PPLICATION NUMBER: US 09/752,983
PRIOR APPLICATION NUMBER: US 09/280,805
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                                                                                                  ; OTHER INFORMATION: Antisense Oligonucleotide PCT-US02-38281-267
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PCT-US02-38281-267
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PRIOR FILING DATE: 2001-12-04
PRIOR PPLICATION NUMBER: US 09/752,983
PRIOR FILING DATE: 2001-01-02
PRIOR APPLICATION NUMBER: US 09/280,805
PRIOR FILING DATE: 1999-03-26
PRIOR APPLICATION NUMBER: US 09/048,810
PRIOR FILING DATE: 1998-03-26
PRIOR FILING DATE: 1998-03-26
PRIOR FILING DATE: 1998-03-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Antisense Oligonucleotide PCT-US02-38281-266
                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 379
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 267
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 266
Query Match
Best Local Similarity
Matches 20; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: PCT/US02/38281
CURRENT FILING DATE: 2002-12-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Loren J. Miraglia
APPLICANT: Pamela S. Nero
APPLICANT: Mark J. Graham
APPLICANT: Brett P. Monia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE:
                                                                                                                                                      TYPE: DNA ORGANISM: Artificial Sequence
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                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT: Ming Yi Chiang
PPLICANT: Muthiah Manoharan
PPLICANT: Isis Pharmaceuticals, Inc.
PTLE OF INVENTION: Antisense Modulation of Human mdm2 Expression
ILE REFERENCE: ISPH-0717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE:
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nes 20; Conserv
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Brett P. Monia
Erich Koller
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Muthiah Manoharan
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  0.7%; Silarity 100.0%; Conservative 0;
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Pred. No.
                        Score 20; DB 1; I
Pred. No. 6.9e+06;
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117, App
542, App
642, App
642, App
6471, Ap
27, App
144, Ap
1367, Ap
1367,

Sequence Sequence Sequence

117, 546, 642,

Sequence Sequence Sequence

Sequence

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Result
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Maximum DB
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         length: 0 length: 20
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Match Length
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2818
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PCT-US04-04452-1813
US-10-63-416-23
US-10-708-204-5116
US-09-574-7798-30
US-10-708-204-5092
US-10-708-204-5130
PCT-US03-25997A-50
US-10-708-204-3851
US-10-708-204-5190
US-10-708-204-5190
US-10-708-204-5190
US-10-708-204-5190
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US-10-708-204-3841
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(without alignments)
6400.467 Million cell updates/sec
Sequence 51, Appl Sequence 25, Appl Sequence 23, Appl Sequence 31, Appl Sequence 31, Appl Sequence 30, Appl Sequence 30, Appl Sequence 3825, Appl Sequence 5130, Appl Sequence 252, Appl Sequence 252, Appl Sequence 3854, Appl Sequence 5172, Appl Sequence 5172, Appl Sequence 5014, Appl Sequence 5014, Appl Sequence 5101, Appl Sequence 5101, Appl Sequence 3834, Appl Sequence 3834, Appl Sequence 3834, Appl Sequence 3841, Appl Sequence 3841, Appl Sequence 3843, Appl Sequence 3841, Appl Sequence 3842, Appl Sequence 3844, Appl Sequence 3844, Appl Sequence 3844, Appl Se
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                             RESULT 2
PCT-US04-04452-1813/c
Sequence 1813, Application PC/TUS0404452
GENERAL INFORMATION:
APPLICANT: Bardelli, Alberto
APPLICANT: Parsons, Will
APPLICANT: Velculescu, Victor
APPLICANT: Venzier, Kenneth W.
APPLICANT: Vogelstein, Bert
FITLE OF INVENTION: TYROSINE KINASES IMPLICATED IN CANCERS
FILE REFERENCE: 001107.00327
CURRENT APPLICATION NUMBER: PCT/US04/04452
CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 2191
SOUTWARE: FeatSEQ for Windows Version 4.0
FYUSE: Name 120
FYUSE: Nam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA; ORGANISM: Homo sapiens PCT-US04-04452-51
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PCT-US04-04452-51/c
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Best Local Similarity
Matches 20; Conserv
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 51
LENGTH: 20
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Bardelli, Alberto
APPLICANT: Parsons, Will
APPLICANT: Velculescu, Victor
APPLICANT: Velculescu, Victor
APPLICANT: Vinzler, Kenneth W.
APPLICANT: Vogelstein, Bert
TITLE OF INVENTION: TYROSINE KINASES IMPLICATED IN CANCERS
FILE REFERENCE: 001107.00327
CURRENT APPLICATION NUMBER: PCT/US04/04452
CURRENT FILING DATE: 2004-02-18
   TYPE: DNA
ORGANISM: Homo sapiens
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PCT-US04-04452-546

PCT-US04-04452-642

US-10-708-204-3210

US-10-708-204-4471

US-10-708-204-5144

US-10-708-204-5144

US-10-14-535-2

PCT-US04-04452-1367

US-10-708-27-1367

US-10-708-27-104

PCT-US03-31862-104

PCT-US03-31862-104

PCT-US03-32862-104

PCT-US03-32862-104

PCT-US03-2038-164

US-10-708-204-3140

PCT-US03-04-91-1067

US-10-9-574-779B-15

US-10-484-805-9
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PCT-US04-04452-1813

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US-10-653-416-25/c
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                                                                                              PRIOR APPLICATION NUMBER: 60/310,285
PRIOR FILING DATE: 2001-08-06
NUMBER OF SEQ ID NOS: 23
SOFTWARE: Patentin Ver. 3.2
SEQ ID NO 23
SEQ ID NO 23
                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 23, Application US/10213257 GENERAL INFORMATION:
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SOFTWARE: PatentIn Ver. 3.2
SEQ ID NO 25
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Best Local
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APPLICANT: SCHUSTER, DAVID M.
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR CDNA SYNTHESIS
FILE REFERENCE: 38266-0011
                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/213,257
CURRENT FILING DATE: 2002-08-06
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CURRENT FILING DATE: 2003-09-03
PRIOR APPLICATION NUMBER: 60/407,248
PRIOR FILING DATE: 2002-09-03
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OTHER INFORMATION: Description OTHER INFORMATION: primer
                                    FEATURE:
                                                  ORGANISM: Artificial Sequence
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Pred. No.
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Pred. No.
               of Artificial Sequence: Synthetic
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US-10-708-204-5092/c

Sequence 5092, Application US/10708204 GENERAL INFORMATION:

APPLICANT: ROSETTA GENOMICS LTD

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US-10-708-204-5116/c
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CURRENT APPLICATION NUMBER: US/10/708,204
CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 7351
SOFTWARE: PatentIn version 3.2
SEQ ID NO 5116
                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 99201543.8
PRIOR FILING DATE: 1999-05-17
NUMBER OF SEQ ID NOS: 158
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 30
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GENERAL INFORMATION:
APPLICANT: VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOL
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: Novel cDNAs encoding catenin-binding proteins with TITLE OF INVENTION: function in signalling and/or gene regulation FILE REFERENCE: 2676-4415US
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TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY
TITLE OF INVENTION: OLIGONUCLECTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES
TITLE OF INVENTION: THEREOF
                                                                                                                                                               FEATURE:
                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                              ORGANISM: Artificial Sequence
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SEQ ID NO 5092
LENGTH: 20
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GENERAL INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY
TITLE OF INVENTION: OLIGONUCLECTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES
TITLE OF INVENTION: THEREOF
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GENERAL INFORMATION:
APPLICANT: RASHTCHIAN, AYOUB
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Best Local Similarity
Matches 19; Conserv
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SEQ ID NO 3825
LENGTH: 18
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CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 7351
                                 FILE REFERENCE: 55033
CURRENT APPLICATION NUMBER: US/10/708,204
CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 7351
SOFTWARE: PatentIn version 3.2
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CURRENT FILING DATE: 2003-09-03
PRIOR APPLICATION NUMBER: 60/407,248
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TITLE OF INVENTION: COMPOSITIONS AND METHODS
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NUMBER OF SEQ ID NOS: 26
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ORGANISM: Homo Sapiens
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ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES
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3.2e+02;
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; TYPE: RNA; ORGANISM: Homo Sapiens US-10-708-204-5130
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; ORGANISM: Homo Sapiens
US-10-708-204-3825
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PCT-US03-25997A-50/c
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US-10-708-204-5130/c
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                                                                                                                             PCT-US03-25997A-50
                                                                                                                                                                                                                   TITLE OF INVENTION: NUCLEOTIDE SEQUENCES AND POLYPEPTIDES TITLE OF INVENTION: INCREASING PLANT SIZE AND INCREASING FILE REFERENCE: 2750-1573F(PC)
CURRENT APPLICATION NUMBER: PCT/US03/25997A
CURRENT FILING DATE: 2003-08-18
NUMBER OF SEQ ID NOS: 50
SOCTWARE: Patentin version 3.0
SEQ ID NO 50
LENGTH: 19
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Best Local Similarity
Matches 18; Conserv
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SOFTWARE: PatentIn version 3.2
SEQ ID NO 5130
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 5130, Application US/10708204 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                      Sequence 50, Application PC/TUS0325997A
GENERAL INFORMATION:
APPLICANT: CERES, INC.
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Best Local Similarity
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CURRENT APPLICATION NUMBER: US/10/708,204
CURRENT FILING DATE: 2004-02-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY
TITLE OF INVENTION: OLIGONUCLEOTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES
TITLE OF INVENTION: THEREOF
                                                                                                                                                                           TYPE: DNA
ORGANISM: Artificial Sequence
                                                                                                                                            OTHER INFORMATION: Oligo primer used in the generation of OTHER INFORMATION: hybridization from first-strand cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 18
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Pred. No.
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Pred. No.
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Pred. No.
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RESULT 12 PCT-US04-04452-252

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RESULT 13
US-10-708-204-2896
(SEQUENCE 2895, Application US/10708204
(SEQUENCE 2895, Application US/10708204
(GENERAL INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY
TITLE OF INVENTION: OLIGONUCLEOTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES
TITLE OF INVENTION: THEREOF
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US-10-708-204-3868/c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: RNA
ORGANISM: Homo Sapiens
US-10-708-204-2896
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Homo sapiens
PCT-US04-04452-252
SEQUENCE 3868, Application US/10708204

SEQUENCE 3868, Application US/10708204

SEQUENCE 3868, Application US/10708204

REPELCANT: NOSETTA GENOMICS LTD

TITLE OF INVENTION: BIOINFORMATICALLY DETECTABLE GROUP OF NOVEL REGULATORY

TITLE OF INVENTION: OLIGONUCLEOTIDES ASSOCIATED WITH ALZHEIMER'S DISEASE AND USES

TITLE OF INVENTION: THEREOF

FILE REFERENCE: 55033

CURRENT APPLICATION NUMBER: US/10/708,204

CURRENT APPLICATION NUMBER: US/10/708,204

CURRENT FILING DATE: 2004-02-16

NUMBER OF SEQ ID NOS: 7351

SOFTWARE: PatentIn version 3.2

SEQ ID NO 3868

LENGTH, 20

TYPE: RNA

ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TILE REFERENCE: 55033
CURRENT APPLICATION NUMBER: US/10/708,204
CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 7351
SOFTWARE: Patentin version 3.2
SEQ ID NO 2896
LENGTH: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: PCT/US04/04452
CURRENT FILING DATE: 2004-02-18
NUMBER OF SEQ ID NOS: 2191
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 252
LENGTH: 19
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Best Local :
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APPLICANT: Parsons, Will
APPLICANT: Velculescu, Victor
APPLICANT: Kinzler, Kenneth W.
APPLICANT: Vogelstein, Bert
TITLE OF INVENTION: TYROSINE KINASES IMPLICATED IN CANCERS
FILE REFERENCE: 001107.00327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 13; Conserv
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100.0%; Pred. No. 3.2e+0
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Pred. No. 3.1e+02;
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CURRENT APPLICATION NUMBER: US/10/708,204
CURRENT FILING DATE: 2004-02-16
NUMBER OF SEQ ID NOS: 7351
SOOTWARE: PatentIn version 3.2
SEQ ID NO 3854
LENGTH: 19
TYPE: RNA
ORGANISM: Homo Sapiens
US-10-708-204-3854
                                                                                                                                                                                                                                                                                                                                                                          Sequence 3854, Application US/10708204
GENERAL INFORMATION:
APPLICANT: ROSETTA GENOMICS LTD
TITLE OF INVENTION: BIOINFORMATICALLY DE
TITLE OF INVENTION: OLIGONUCLEOTIDES AS
TITLE OF INVENTION: THEREOF
FILE REPERENCE: 55033
Search completed: March Job time: 94 secs
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US-10-708-204-3854/c
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Best Local Similarity
Matches 18; Conserv
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Best Local Similarity 100.0%;
Matches 17; Conservative (
                                                                                                          2074 TGCACTCCAGCCTGGGC 2090
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                  7, 2004, 22:43:56
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. 7.6e+02;
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3.1e+02;
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AZ3415390
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AZ343031
AZ351273
AZ3569734
AZ366573
AZ396481
AZ496481
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AZ5833158
AZ583

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CF301720 7LEAF - 06
CF301720 7LEAF - 07
CF310604 ABF--05-F
CF3113667 HD--01-B0
CF3131369 HD--01-B0
CF321721 HD--13-B0
CF321721 HD--13-B0
CF321721 HD--13-B0
CF331710 JMT--01-P
CF334170 JMT--07-P
CF334170 JMT--07-P
CF334170 JMT--07-P
CF337494 JMT--07-P
CF337494 JMT-07-P
CF337491 JM0009N10
AZ341530 IM00073N21
AZ341530 IM00073N21
AZ341530 IM00073N21
AZ341530 IM00075F13
AZ351Z73 IM00099A20
AZ3315273 IM0009A20
AZ341530 IM00073N21
AZ346273 IM0020C24
AZ386573 IM0126C24
AZ386573 IM0126C24
AZ386573 IM0126C24
AZ386573 IM0126C24
AZ396481 IM0126C24
AZ396481 IM0126C24
AZ396481 IM0126C21
AZ477734 IM0267263
AZ477734 IM0267263
AZ477736 IM0361E11
AZ5688011 IM0361E11
AZ5688011 IM0361E11
AZ56314729 IM0361E11
AZ563155 IM0460N25
AZ63314 IM0460N25

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CF282035 CF282414 CF299822 CF301720 CF3010604 CF313067 CF3131367 CF3131313 CF321721 CF3221721 CF3221721 CF333173 CF334170 CF334170 CF334170 CF334170 CF334170 CF334170

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ALIGNMENTS

	RESULT 1	
	HSM002936	
	ID HSM002936 standard; mRNA; EST; 20 BP.	
	AC AL038460;	
	XX	
	SV AL038460.1	
	XX	
	DT 12-MAR-1999 (Rel. 59, Last updated, Version 1)	
	DE Homo sapiens mRNA; EST DKFZp566B2246_r1 (from clone DKFZp566B2246)	
	KW EST; expressed sequence tag.	
	X	
	OS Homo sapiens (human)	
	OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia;	
	OC Eutheria; Primates; Catarrhini; Hominidae; Homo.	
	XX	
	RN [1]	
•	RP 1-20	
	RA Ottenwaelder B., Obermaier B., Mewes W., Gassenhuber J., Wiemann S.;	
	RL Submitted (12-MAR-1999) to the EMBL/GenBank/DDBJ databases.	

Result

Score

Query Match

Length

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Description

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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HSM002936 HSM003226 ) AW334823 CF280913

Al038460 Homo sapi Al038750 Homo sapi AW334823 S39F5 AGS CF280913 14ETL--07

CXE

from S. Wiemann,

sequenced by MediGenomix within the cDNA

MIPS, Clone

Am Klopferspitz 18a D-82152 Martinsried, GERMANY

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HSM003226
ID HSM003226
XX AL038
XX AL038
XY AL038
XY AL038
XY AL038
XY EST;
XX EST;
XX EST;
XX I12-MA
DT 12-MA
DT 12-MA
CC Eutkar
XX I1-20
RA Otten
RI Submi
RL MIPS,
XX CC Clone
CC Seque
CC Clone
CC Seque
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Please contact the RZPD: Ressourcenzentrum, He
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                  /organism="Homo sapiens"
/clone="DKFZD566M1146"
/clone_lib="566 (synonym: hfkd2).
X1-2blue; sites NotI + SalI"
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Smulian, A.G., Arnold, J., Weise, M., Wunderlich, J.,
Edman, J.C., Kovacs, J. and Cushion, M.
Expressed sequence tags from Pneumocystis carinii
Unpublished (2000)
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20; Conserv
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.
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101 Morgan Building, U
40506-0225, USA
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Eukaryota; Fungi; Ascomycota; Pneumocystidomycetes;
Pneumocystidaceae; Pneumocystis.
                                                                                                           Oryza sativa
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Fax: 606 257 1717
Email: staben@pop.uky.edu.
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/lab host="E. coli"
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/note="Vector: Lambda ZAP II; Site_1: EcoRI; Site_2:
/note="Vector: Lambda ZAP II; Site_1: EcoRI; Site_2: EcoRI; Site_2:
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RESULT 5
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                                                                                                                                                                                                                                                                                   Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H.,

Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oryza sativa
Oryza sativa
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Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
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Tel: 82 31 330 6193
Fax: 82 31 321 6355
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CF282035.1 GI:33659422
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Location/Qualifiers
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with oligoribonuclectides and then used as templates for
pr_pr_B
/db xref="taxon:4530"
/clone="148TL--09-F19"
/tissue_type="leaf"
/dev stage="14 days after germination"
/lab_host="E.coli DH10B"
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/mol_type="mRNA"
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/tissue_type="leaf"
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DEFINITION ACCESSION

CP299822 20 bp mRNA linear 7LEAF--03-P22.bl Rice leaf plasmid cDNA library II sativa cDNA clone 7LEAF--03-P22, mRNA sequence. CF299822

EST 15-AUG-2003 (7LEAF) Oryza

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RESULT 7
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14ETL--09-019.g1 Rice etiolated leaf plasmid cDNA library
Oryza sativa cDNA clone 14ETL--09-019, mRNA sequence.
CF282414
                                                                   1 AAAAAAAAAAAAAAAAAA 20
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Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)
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20; Conserv
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Tel: 82 31 330 6193
Fax: 82 31 321 6355
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Location/Qualifiers
                                                                                                                                                                                                                  /note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."
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with oligoribonucleotides
RT-pCR."
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/lab_host="E.coli DH10B"
/clone_lib="Rice etiolated leaf plasmid cDNA library
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/clone="14ETL--09-019"
/tissue_type="leaf"
                                                                                                                                                                                                                                                                                                                                                                                 organism="Oryza sativa"
/mol_type="mRNA"
/cultivar="Nackdong"
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Pred. No.
                                                                                                                                    Mismatches
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RESULT 8
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Le Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H. Large-scale Sequencing Analysis of Rice ESTs Unpublished (2003)
                                                                                                                                                   Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University
                                                                                                                                                                                                                                                                                                        Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.
                                                                                                                                                                                                                                                                                                                                                                      Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                  sativa cDNA clone TLEAF--06-L01, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CF301720 20 bp mRNA linear EST 15-AUG-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, Myongdi University Yongin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H.,

Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)
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                                                                                                                                                                                               Contact: Nahm B.H
                                                                                                                                                                                                                                                                                                                                                                                                                                CF301720.1 GI:33673481
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EST.
                                                                                                                                   Yongin,
                                                                                                                                                                                                                                                                                                                                                                                            Oryza sativa
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                                                                                             jin, Kyeonggi, Koi
: 82 31 330 6193
: 82 31 321 6355
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Location/Qualifiers
                                                                             bhnahm@ggbio.com, bhnahm@bio.myongji.ac.kr
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with oligoribonuclectides and then used as templates for
RT-PCR."
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/mol_type="mRNA"
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                                                           Location/Qualifiers
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100.0%; Pred. No.
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CF302027/c
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                                                                                             Query Match
Best Local Similarity
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Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H., Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Yongin, Kyeonggi, Ko
Tel: 82 31 330 6193
Fax: 82 31 321 6355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Ehrhartoideae; Oryzeae; Oryza.
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CF302027

CF302027

TLEAF-07-C16.b1 Rice leaf plasmid cDNA library II (7LEAF) Oryza sativa cDNA clone 7LEAF-07-C16, mRNA sequence.

CF302027

CF302027.1 GI:33673788

EST.

CFYZA SATIVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Oryza sativa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    of Bioscience and Bioinformatics, MyongJi University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Nahm B.H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomics and Genetics Institute, GreenGene Biotech Inc.; Division
AAAAAAAAAAAAAAAAAA
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                                                                             Conservative
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Location/Qualifiers
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/db xref="taxon:4530"
/clome="TLAFF-06-TO1"
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/dev gree="7 days after germination"
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/note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped
with oligoribonucleotides and then used as templates for
RT-PCR."
                                                                                                                                                                             /clone="7LEAF--07-C16"
/tlssue type="leaf"
/dev_stage="7 days after germination"
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/clone_lib="Rice leaf plasmid cDNA library II (7LEAF)"
/note="Vector: pCR4-TOPO; Site 1: EcoRI; mRNA was capped with oligoribonucleotides and then used as templates for RT-PCR."
                                                                                                                                                                                                                                                                                                                                  cultivar="Nackdong"
/db_xref="taxon:4530"
                                                                                                                                                                                                                                                                                                                                                                         organism="Oryza sativa"
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                                                                                             Score 20;
Pred. No.
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      bhnahm@bio.myongji.ac.kr
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Best Local S
Matches 20
                                                                                                       TITLE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1799 AAAAAAAAAAAAAAAAAA 1818
                                                                                                                                                                                                                                                                                                               library (HD)
CF313067
CF313067.1 G
                                                         Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Ehrhartoideae; Oryzeae; Oryza.

1 (bases 1 to 20)

Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Shin,Y.C., Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)

Contact: Nahm B.H.
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H.,

Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae;
                     Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University
                                                                                                                                                                                                                                                   Oryza sativa
                                                                                                                                                                                                                                                                                            EST.
                                                                                                                                                                                                                                                                                                                                                 HD--01-B02.g1 OsHDAC1-overexpressing transgenic rice plasmid of library (HD) Oryza sativa cDNA clone HD--01-B02, mRNA sequence.
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ABF--05-F14.gl ABF3-overexpressing transgenic rice plasmid CDNA
library (ABF) Oryza sativa CDNA clone ABF--05-F14, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tel:
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EST.
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82 31 330 6193
82 31 321 6355
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Location/Qualifiers
Kyeonggi,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /dev stage=14 days after germination"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cultivar="Nackdong"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        organism="Oryza sativa"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       tissue_type="leaf"
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Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                           20 bp
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                                                                                                                                                                                                                                                                                                                                                                                                                                              Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H., Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H. Large-scale Sequencing Analysis of Rice ESTs Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oryza sativa
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                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Nahm B.H.
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                                                                                                                                                                                                                                                                                                                             gin, Kyeonggi, Ko:
82 31 330 6193
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Location/Qualifiers
                                                                                                                                                                                                                                                                                       Location/Qualifiers
/note="Vector: pCR4-TOPO; Site_1: EcoRI; Callus was treated with ABA(20um) for lhr. Oligo-capped mRNA was reverse transcribed and then used for PCR. mRNA was derived from rice Histone Deacetylase overexpression
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cDNA library (HD)"
                                                                                                               tissue_type="callus"
/dev_stage="proliferated callus on 2N6 media for 2 weeks"
/lab_host="B.coli_DH10B"
                                                                                                                                                                          /db_xref="taxon:4530"
/clone="HD--01-L22"
                                                                                                                                                                                                              organism="Oryza sativa"
/mol_type="mRNA"
/cultivar="Nackdong"
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|dev_stage="proliferated callus on 2N6 media for 2 weeks"
|lab_host="E.coli DH10B"
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/mol_type="mRNA"
/cultivar="Nackdong"
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clone="HD~~01-B02"
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Pred. No.
                                                                                                                                                                                                                                                                                                           bhnahm@bio.myongji.ac.kr
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   EST.
Oryza sativa
                                        CF321721
CF321721.1 GI:33693482
                                                                        HD--13-B05.g1 OsHDAC1-overexpressing transgenic rice plasmid clibrary (HD) Oryza sativa cDNA clone HD--13-B05, mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Yongin, Kyeonggi, Korea
Tel: 82 31 330 6193
Fax: 82 31 321 6355
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Le

Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.

Large-scale Sequencing Analysis of Rice ESTs

Unpublished (2003)

Contact: Nahm B.H.
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                          /note="Vector: pCR4-TOPO; Site_1: EcoRI; Callus was treated with ABA(20um) for lhr. Oligo-capped mRNA was reverse transcribed and then used for PCR. mRNA was
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/mol_type="mRNA"
/cultivar="Nackdong"
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/clone="HD--09-113"
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                                                                                    Yongin, Kyeonggi, Ko
Tel: 82 31 330 6193
Fax: 82 31 321 6355
                                                                                                                            Genomics and Genetics Institute, GreenGene Biotech Inc.; Division of Bioscience and Bioinformatics, MyongJi University Yongin, Kyeonggi, Korea
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( In Kim, J.S., Jun, K.M., Cheong, P.J., Kim, M.J., Lee, T.H.,
Song, S.I., Kim, J.K., Kim, Y.-K. and Nahm, B.H.
Large-scale Sequencing Analysis of Rice ESTs
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Oryza sativa
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Kim,J.S., Jun,K.M., Cheong,P.J., Kim,M.J., Lee,T.H.,
Song,S.I., Kim,J.K., Kim,Y.-K. and Nahm,B.H.
Large-scale Sequencing Analysis of Rice ESTs
Unpublished (2003)
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Tel: 82 31 330 6193
Fax: 82 31 321 6355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Oryza sativa
                                                                                                                                                                                     Contact: Nahm B.H.
                                                                                                                                                                                                                                                                                                                                                                                                            CF328565.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genomics and Genetics Institute, GreenGene Biotech Inc., of Bioscience and Bioinformatics, MyongJi University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Nahm B.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                      bhnahm@ggbio.com,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bhnahm@ggbio.com,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /note="Vector: pCR4-TOPO; Site_1: EcoRI; Callus was treated with ABA(20um) for Ihr. Oligo-capped mRNA was reverse transcribed and then used for PCR. mRNA was derived from rice Histone Deacetylase overexpression
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev_stage="proliferated callus on 2N6 media for 2 weeks" /lab_host="E.coli DH10B" /clone_lib="OsHDAC1-overexpressing transgenic rice plasmid cDNA library (HD)"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tissue_type="callus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   clone="HD--13-B05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      db_xref="taxon:4530"
                                                                                                                                                                                                                                                                                                                                                                                                            GI:33805376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.7%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                        bhnahm@bio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   bhnahm@bio.myongji.ac.kr
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14; 0

Length Indels

0

Gaps

0

.myongji.ac.kr

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Search completed: March 7, 2004, 20:07:28 Job time: 7092 secs
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/tissue_type="callus"
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/dev_stage="proliferated callus on 2N6 media for 30 days"
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with oligoribonucleotides and then used as templates for
RT-PCR."
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